



ICAO update

CAPSCA-MID/08

October 2018

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International Civil Aviation Organization



Collaborative Arrangement for the Prevention and Management of Public Health Events in Civil Aviation

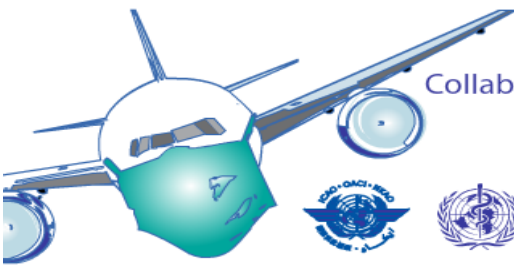
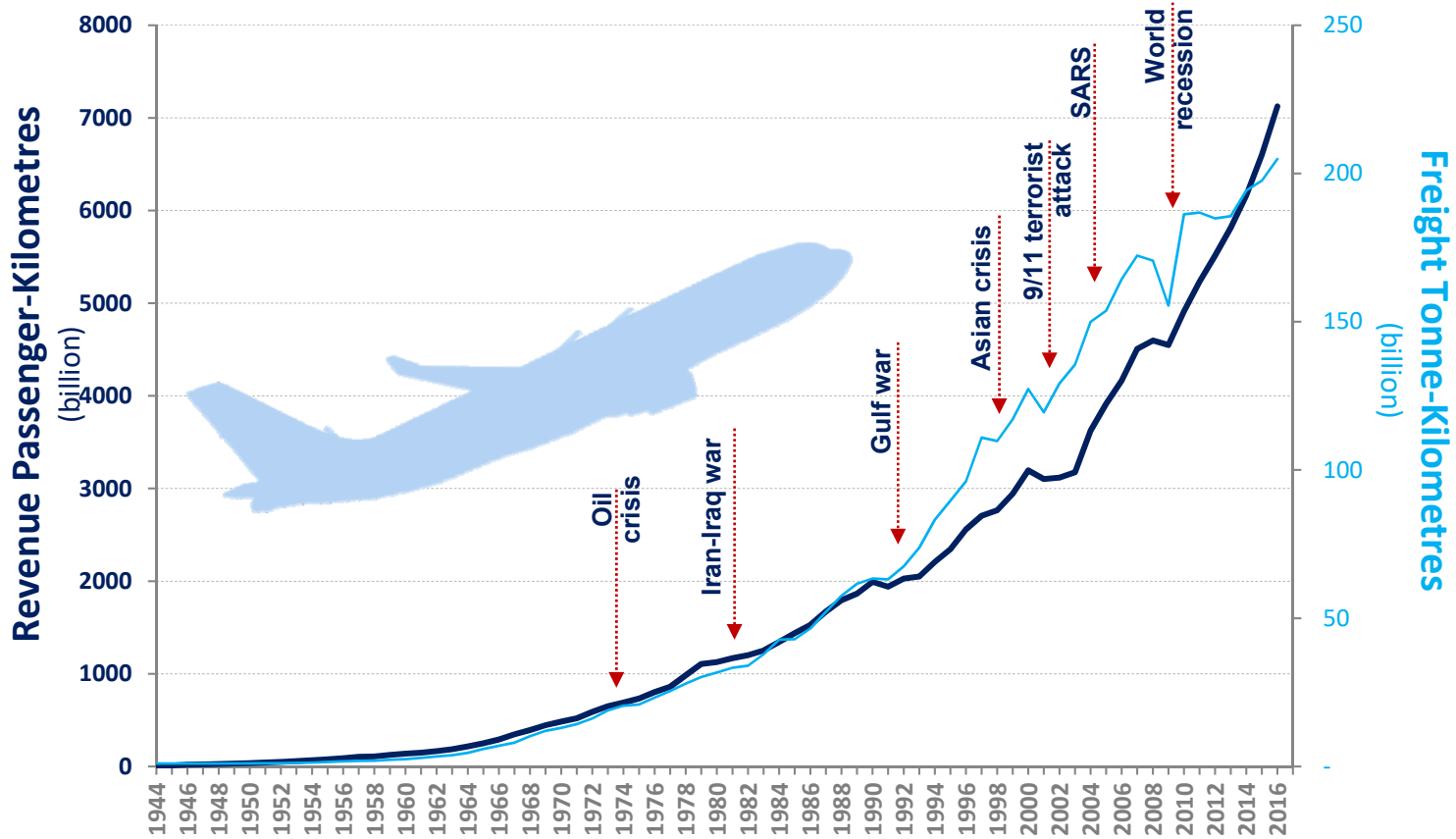
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Aviation in context



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Traffic 2010 - 2040

2040





Communicable disease in ICAO

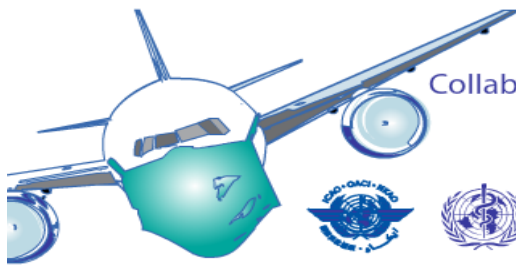
- **Article 14 of the Chicago Convention**
- ‘Each contracting State agrees to take effective measures to prevent the spread by means of air navigation of cholera, typhus (epidemic), smallpox, yellow fever, plague, and such other communicable diseases as the contracting States shall from time to time decide to designate....’



Technical Assistance & Cooperation

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Training Programmes



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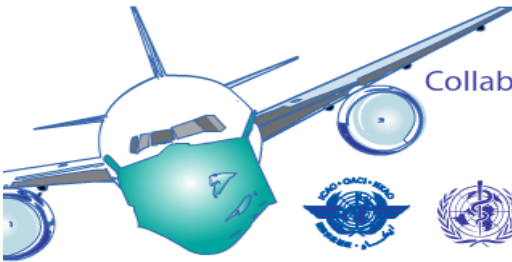
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Vector control and Disinsection

- Annex 9
15th edition – 2017
- Facilitation Manual/ Doc 9957
1st edition – 2011
- Standard – compulsory
- Recommended practice – not compulsory



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Airport Vector Control Register

- Voluntary information sharing for risk assessment concerning vector control practices
- Managed by ICAO and shared with:
 - Civil Aviation Authorities
 - Airports
 - General Public

www.icao.int/crr/Pages/Airport-Vector-Control-Register.aspx



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Airport Vector Control Register

Level 1 - Public:

This report will allow you to see the location of airports that have completed the Vector Control Measures Registration.

(Please refer to [geolocation example](#)).

Level 2 - Airports and respondents:

You will be able to access statistics collected from the data received.


Level 3 - States:

You will be able to access geolocations, statistics and detailed analytical reports for each airport.

Airport Vector Control Register

Airport vector control involves taking control measures (such as spraying, trapping, etc.) against vectors, which IHR defines as "an insect or other animal which normally transports and infectious agent that constitutes a public health risk" with the aim of keeping a vector free area within the 400 meters airport perimeter as stated in the IHR.

Tutorial
Request credential verification and access to register an airport



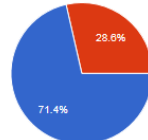
Show 10 entries

Airport Code	Name/City	Country	Registry Created
CYUL	Pierre Elliott Trudeau Intl - Montreal	Canada	4/5/2016 7:10:08
CYYZ	Lesler B Pearson Intl - Toronto	Canada	4/5/2016 10:28:25
KJFK	Kennedy Intl - New York	USA	4/6/2016 13:44:49
LFPO	Orly - Paris	France	4/5/2016 19:04:09
LSGG	Geneva - Geneva	Switzerland	4/6/2016 12:12:18

Vector control measures

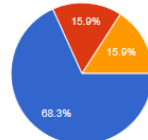
6. Is the airport a designated airport in terms of the International Health Regulations (IHR) ?

	Yes 45 71.4%
	No 18 28.6%



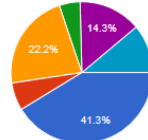
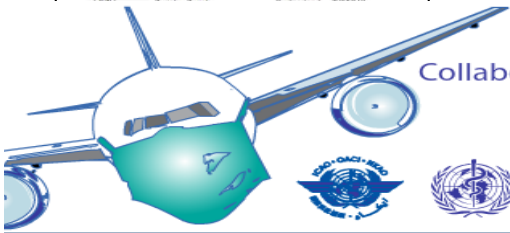
7. Does this airport have a vector control programme?

	Yes 43 68.3%
	No 10 15.9%
	Don't know 10 15.9%



8. Who is the "Competent Authority", as defined in IHR, that is responsible for ensuring the implementation of a vector control program at this airport ?

National Department of Health	26 41.3%
National Department of Transport	4 6.3%
Local municipality Health Department	14 22.2%
Non governmental - Managed by Private Contractor	3 4.8%
I don't know	9 14.3%
Other	7 11.1%

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Aircraft Disinsection

APPENDIX 1. GENERAL DECLARATION

GENERAL DECLARATION
(Outward/Inward)

Operator

Marks of Nationality and Registration Flight No. Date

Departure from (Place) Arrival at (Place)

FLIGHT ROUTING
("Place" Column always to list origin, every en-route stop and destination)

PLACE	NAMES OF CREW*	NUMBER OF PASSENGERS ON THIS STAGE**
		<i>Departure Place:</i>
		Embarking
		Through on same flight
		<i>Arrival Place:</i>
		Disembarking
		Through on same flight

3/4 inches)

APPENDIX 4 CERTIFICATE OF RESIDUAL DISINSECTION

GOVERNMENT OF

CERTIFICATE OF RESIDUAL DISINSECTION

Interior surfaces, including cargo space, of this aircraft were treated with an approved residual
(aircraft registration)
disinsection product on in accordance with the World Health Organization recommendations (WHO Weekly
(date)
Epidemiological Record No. 7, 1985, p. 47; No. 12, 1985, p. 90; No. 45, 1985, pp. 345-346; and No. 44, 1987, pp. 335-336)
and any amendments thereto.

The treatment must be renewed if cleaning or other operations remove a significant amount of the residual disinsection
product, and in any case within 8 weeks of the above date.

Expiry date:

Signed:

Designation:

Date:

Details of each disinsecting or sanitary treatment (place, date, time, method) during the flight. If no disinsecting has been carried out during the flight, give details of most recent disinsecting.....

.....



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Airport/ Aircraft Disinsection

- Is it necessary ?
- Is it effective ?
- Chemical ?
- Non-chemical ?
- Performance standards ?

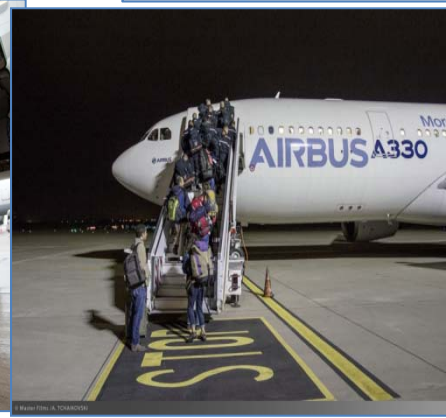
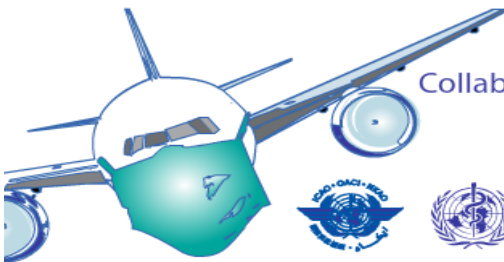


Photo Credit: DeltaPoints.com



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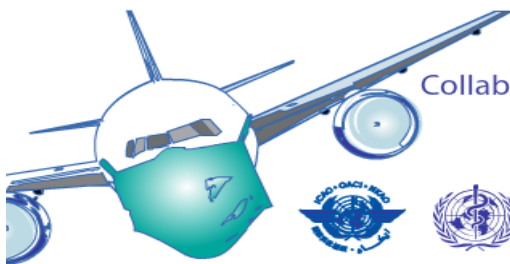


Decision making tool

- Step-based approach with different layers
 - Vector distribution maps
 - Pathogen epidemiology and transmission
 - Airport vector control measures
 - Aircraft routes and disinsection methods

Vector: Month: Region:

Departure Airport: Arrival Airport: Airline:



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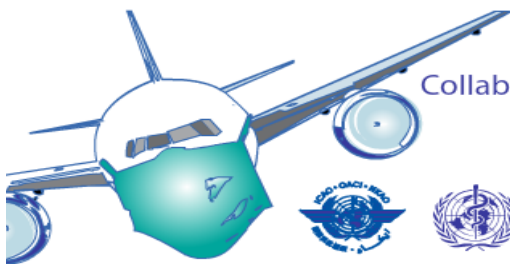




Risk assessment tool approach

- Draft questionnaire
- Interviews with stakeholders
- Modify questionnaire
- On-line survey for weighting of questions
- Determine risk based on answers to questions
- Wider consultation to amend initial risk assessment model
- Pilot study for some routes
- Publish App

4. Arrival Airport	4.1 >400M distance?	0.2547	3.1 %
	4.2 use env vector ctrl	0.3448	4.2 %
	4.3 diversion airport?	0.1784	2.2 %
	4.4 PoE ranking	0.0918	1.1 %
	4.5 IHR category?	0.0877	1.1 %
	4.6 Doc 4444?	0.0427	0.5 %
5. Conveyance Operators	5.1 cargo/luggage vector ctrl?	0.2144	4.3 %
	5.2 not-in-use door closed?	0.1895	3.8 %
	5.3 screens for passenger door?	0.0921	1.9 %
	5.4 screens for cargo doors?	0.2339	4.7 %
	5.5 assigned personnel?	0.1027	2.1 %
	5.6 use residual diss?	0.1207	2.4 %
	5.7 use MX at airport?	0.0466	0.9 %



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Decision making tool

#	1. Region Indicators	Question Type	Risks involved	Weight	Real Weight	Response	Score
1.1	Is the region where the airport is located known to have targeted vectors based on vector map (http://vectormap.nhm.ku.edu/vectormap)	Yes/No based on Map	Yes = higher risk	0.0928	2.764%	Please select... ▾	---
1.2	Is it the relevant season and climate of the targeted vector in the region where the airport is located?	Yes/No	Yes = higher risk	0.2221	6.614%	Please select... ▾	---
1.3	Is the region where the airport is located under any vector-borne disease advisory and/or the WHO published list where disinsection or vector control are recommended?	Yes/No	Yes = higher risk	0.2561	7.627%	Please select... ▾	---
1.4	Has there been a vector-borne disease outbreak in this region in the past?	Yes/No	Yes = higher risk/th>	0.1642	4.890%	Please select... ▾	---
1.5	What is the volume of flights in the region where the airport is located based on the Air Connectivity Index[1]?	Use Air Connectivity Index ranking	Higher ranking = higher risk	0.0942	2.805%	<input type="text"/>	---
1.6	Is the absence of targeted vectors confirmed through the vector surveillance programs?	Yes/No	Yes = lower risk	0.1707	---	Please select... ▾	---

Total Weight:0.254



Decision making tool

#	2. Surveillance Indicators	Question Type	Risks involved	APH Score	Real Weight	Response	Score
2.1	Does the airport vector surveillance program use vector collection devices/traps that are approved by the scientific community as being appropriate for the targeted vector?	Yes/No	Yes = lower risk	0.1887	4.793%	Please select... ▼	---
2.2	Is the vector surveillance conducted by trained airport/government personnel or approved contracted services?	Yes/No	Yes = lower risk	0.2697	6.850%	Please select... ▼	---
2.3	Are the results of the vector surveillance used to develop and implement airport vector control programs?	Yes/No	Yes = lower risk	0.3851	9.782%	Please select... ▼	---
2.4	Are the results and associated risks from vector surveillance communicated to users and management of the airport?	Yes/No	Yes = lower risk	0.1564	3.973%	Please select... ▼	---

Total Weight:0.2267



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Decision making tool

#	3. Departure Airport Indicators	Question Type	Risks involved	AHP Score	Real Weight	Response	Score
3.1	Does the departure airport have routes to non-endemic regions of targeted vectors or international operations that include:			0.1181	2.677%		
3.1.1	Scheduled passenger operations?	Yes/No	Yes = higher risk	0.4213	1.128%	Please select... ▼	---
3.1.2	Cargo operations?	Yes/No	Yes = higher risk	0.2252	0.603%	Please select... ▼	---
3.1.3	Non-Scheduled passenger operations?	Yes/No	Yes = higher risk	0.1872	0.501%	Please select... ▼	---
3.1.4	Military or state operations?	Yes/No	Yes = higher risk	0.1662	0.445%	Please select... ▼	---
3.2	Does the airport provide approved chemical or mechanical disinsection services for aircrafts?	Yes/No	Yes = lower risk	0.2478	5.618	Please select... ▼	---
3.3	Are the jetway/walkway/stairway/door to the aircraft closed when it is not in service?	Yes/No	Yes = lower risk	0.1754	3.976%	Please select... ▼	---
3.4	Are the gates/jetways/walkways/stairways equipped with mechanical disinsection capabilities?	Yes/No	Yes = lower risk	0.1629	3.693%	Please select... ▼	---
3.5	Is the departure airport able to provide minimum distance of 400m from the nearest Point of Entry (PoE) or designated parking position that can isolate aircrafts from vector threats?	Yes/No	Yes = lower risk	0.1506	3.414%	Please select... ▼	---
3.6	Is the airport vector control program implemented and managed in accordance to ongoing presence of target vectors and environmental change?	Yes/No	Yes = lower risk	0.1452	3.292%	Please select... ▼	---

Total Weight:0.0674



Decision making tool

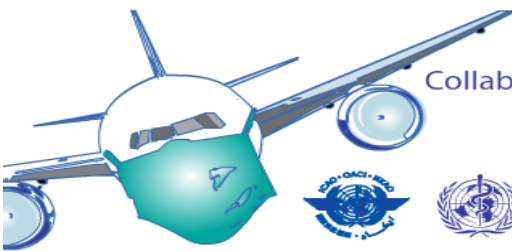
#	4. Arrival Airport Indicators	Question Type	Risks involved	APH Score	Real Weight	Response	Score
4.1	Is the arrival airport able to provide minimum distance of 400m from the nearest Point of Entry (PoE) or designated parking position if arriving aircraft may be carrying possible infectious agents or vectors in reference to IHR (2005) Annex 5.1?	Yes/No	Yes = lower risk	0.291	1.961%	Please select... ▼	---
4.2	Is the arrival airport's vector control program implemented and managed in accordance to possible targeted vectors threats and environmental change?	Yes/No	Yes = lower risk	0.4266	2.875%	Please select... ▼	---
4.3	Are there alternative airports in the region if diversion is necessary as per IHR (2005) Annex 5.7?	Yes/No	Yes = lower risk	0.1091	0.735%	Please select... ▼	---
4.4	What score did the region of the arrival airport receive for PoE.1 Routine capacities are established at PoE in reference to WHO's IHR (2005) Joint External Evaluation?	JEE Score	Scale: 1 - 5 (higher score = lower risk)	0.1733	1.168%	Please select... ▼	---

Total Weight:0.1541

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Decision making tool

#	5. Conveyance Indicators	Question Type	Risks involved	AHP Score	Real Weight	Response	Score
5.1	Does the operator utilize residual disinsection consistent with WHO or government regulations?	Yes/No	Yes = lower risk	0.3237	4.988%	Please select... ▼	---
5.2	Does the operator have a guideline or policy for cargo and luggage vector-control practices?	Yes/No	Yes = lower risk	0.2083	3.210%	Please select... ▼	---
5.3	Does the operator leave aircraft entry points open when airframe is parked and not in preparation for operation?	Yes/No	Yes = higher risk	0.2406	3.708%	Please select... ▼	---
5.4	Does the operator use self-closing screens for passenger entries?	Yes/No	Yes = lower risk	0.1323	2.039%	Please select... ▼	---
5.5	Does the operator use maintenance facilities at the departure airport? IF yes:	Yes/No	Higher ranking = higher risk	0.0951	1.465%	Please select... ▼	---
5.5.1	Does the maintenance facility utilize chemical or mechanical disinsection when servicing the aircraft?	Yes/No	Yes = lower risk	0.4455	0.653%	Please select... ▼	---
5.5.2	Does the maintenance facility conduct repair in a closed hangar?	Yes/No	Yes = lower risk	0.5545	0.813%	Please select... ▼	---



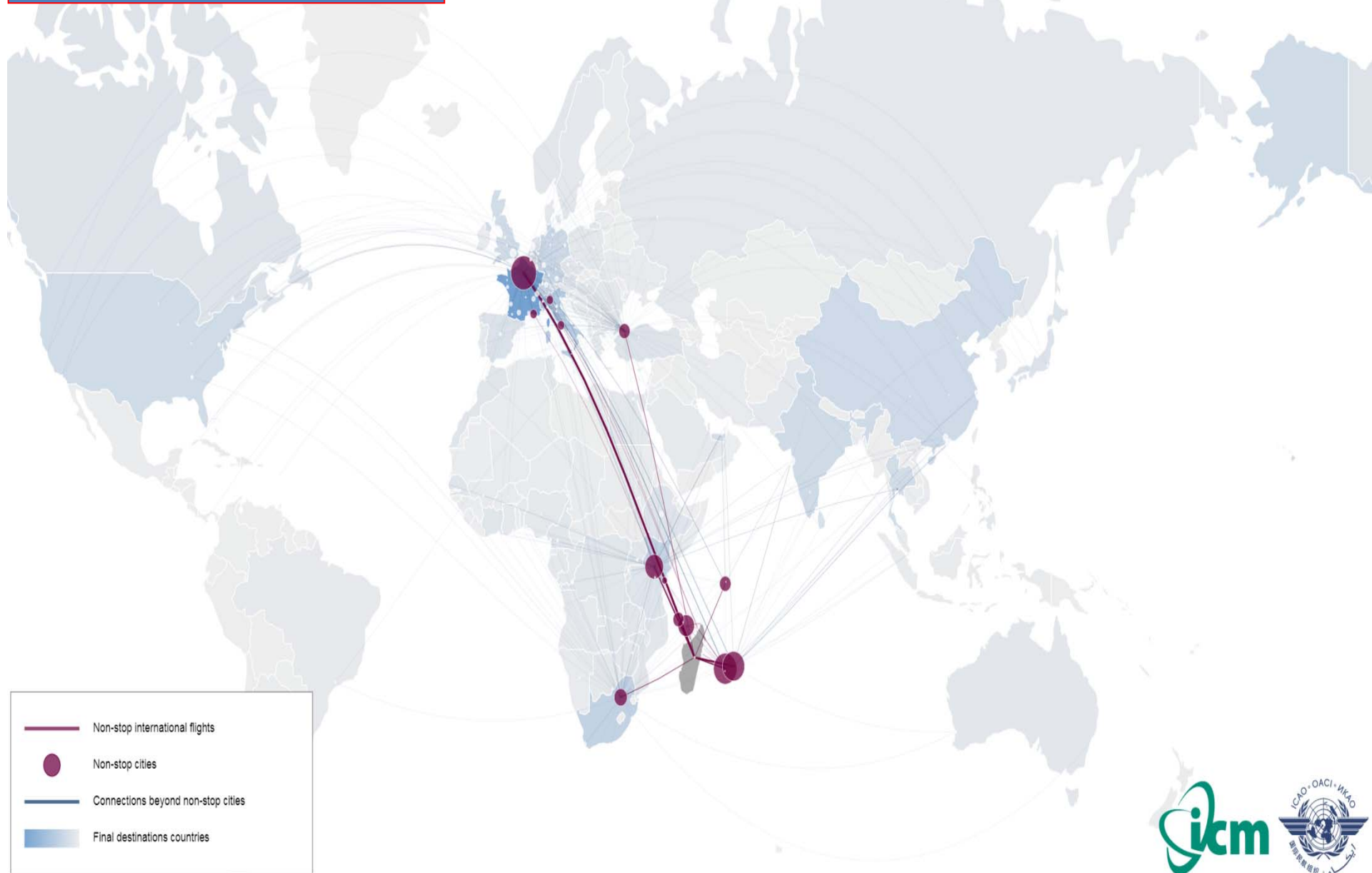
Decision making tool

#	5. Conveyance Indicators	Question Type	Risks involved	AHP Score	Real Weight	Response	Score
5.1	Does the operator utilize residual disinsection consistent with WHO or government regulations?	Yes/No	Yes = lower risk	0.3237	4.988%	Please select... ▼	---
5.2	Does the operator have a guideline or policy for cargo and luggage vector-control practices?	Yes/No	Yes = lower risk	0.2083	3.210%	Please select... ▼	---
5.3	Does the operator leave aircraft entry points open when airframe is parked and not in preparation for operation?	Yes/No	Yes = higher risk	0.2406	3.708%	Please select... ▼	---
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Major international air traffic originating from Madagascar in 2016

Annual flight data

Plague outbreak in Madagascar



Origin Airport	Transfer 1 Airport	Transfer 2 Airport	Destination Airport	Average weekly passengers	Fraction	Rank
Ivato - Antananarivo			Sir Seewoosagur Ramgoolam - Port Louis	685	5.6%	1
Ivato - Antananarivo			Charles de Gaulle - Paris	632	5.2%	2
Ivato - Antananarivo			Roland Garros - St Denis	626	5.1%	3
Ivato - Antananarivo			Prince Said Ibrahim - Moroni	270	2.2%	5
Ambovov			Dzaoudzi Pamandzi	189	1.5%	12
Ivato - Antananarivo			Paris-Orly	166	1.4%	15
Ivato - Antananarivo			Dzaoudzi Pamandzi	163	1.3%	16
Fascene - Nosy Be			Roland Garros - St Denis	157	1.3%	18
Ivato - Antananarivo			OR Tambo - Johannesburg	141	1.2%	22
Ivato - Antananarivo			Jomo Kenyatta - Nairobi	131	1.1%	24
Toamasina			Roland Garros - St Denis	127	1.0%	25
Fascene - Nosy Be			Dzaoudzi Pamandzi	113	0.9%	29
Ivato - Antananarivo			Seychelles - Mahe Island	112	0.9%	30
Arrachart			Dzaoudzi Pamandzi	104	0.9%	31
Ivato - Antananarivo	Seychelles - Mahe Island		Charles de Gaulle - Paris	104	0.9%	32
Fascene - Nosy Be			Leonardo da Vinci-Fiumicino - Rome	98	0.8%	35
Ivato - Antananarivo	Sir Seewoosagur					

Plague Madagascar



Flight Information App

Real time data as from 21 Aug 2017

Select a State

China ▼

From Date:

2017-10-01

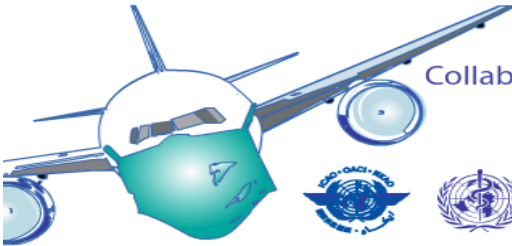
To Date:

2017-12-31

Submit

Select Airports

- ALL
- BEIJING / Capital / ZBAA
- CHANGSHA / Huanghua / ZGHA
- CHENGDU / Shuangliu / ZUUU
- CHONGQING / Jiangbei / ZUCK
- DALIAN / Zhoushuizi / ZYTL
- FUZHOU / Changle / ZSFZ
- GAOXIONG / Gaoxiong / RCKH



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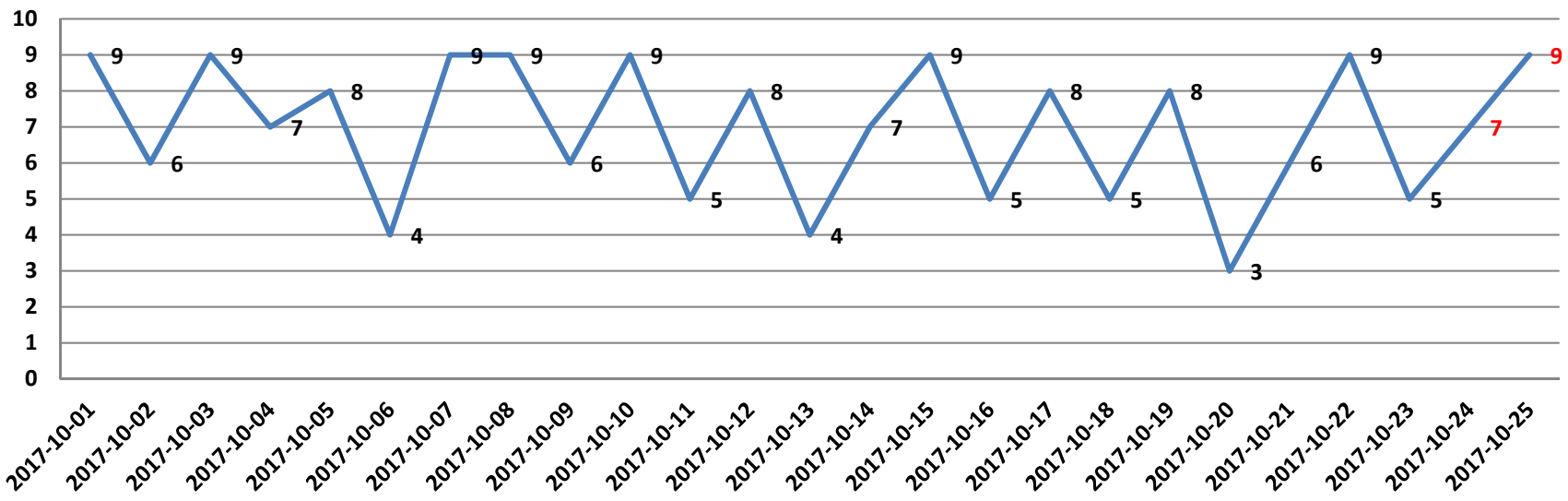
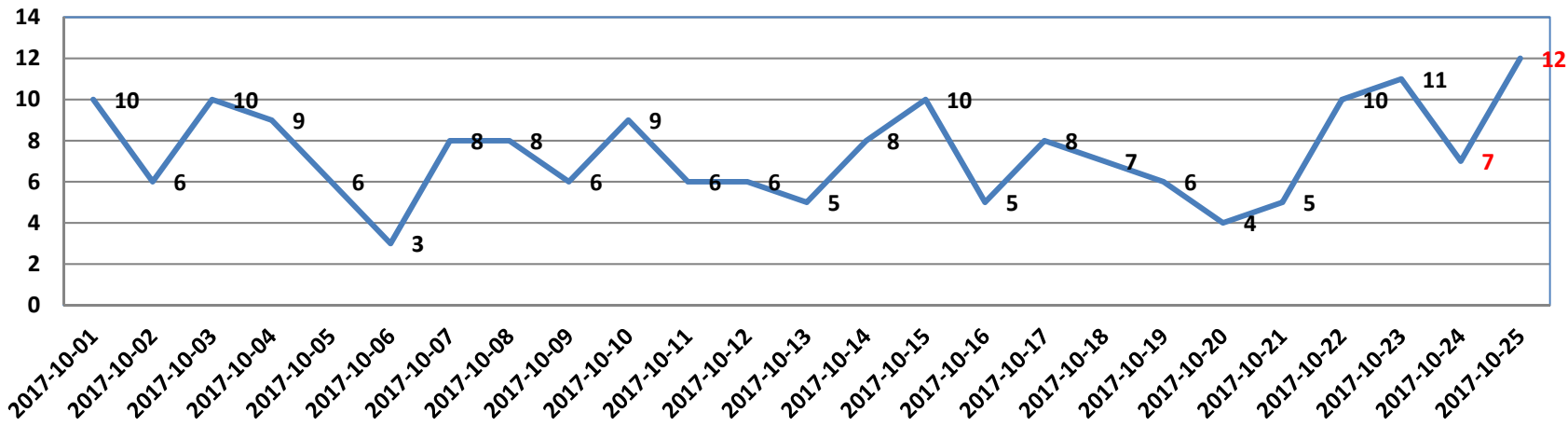
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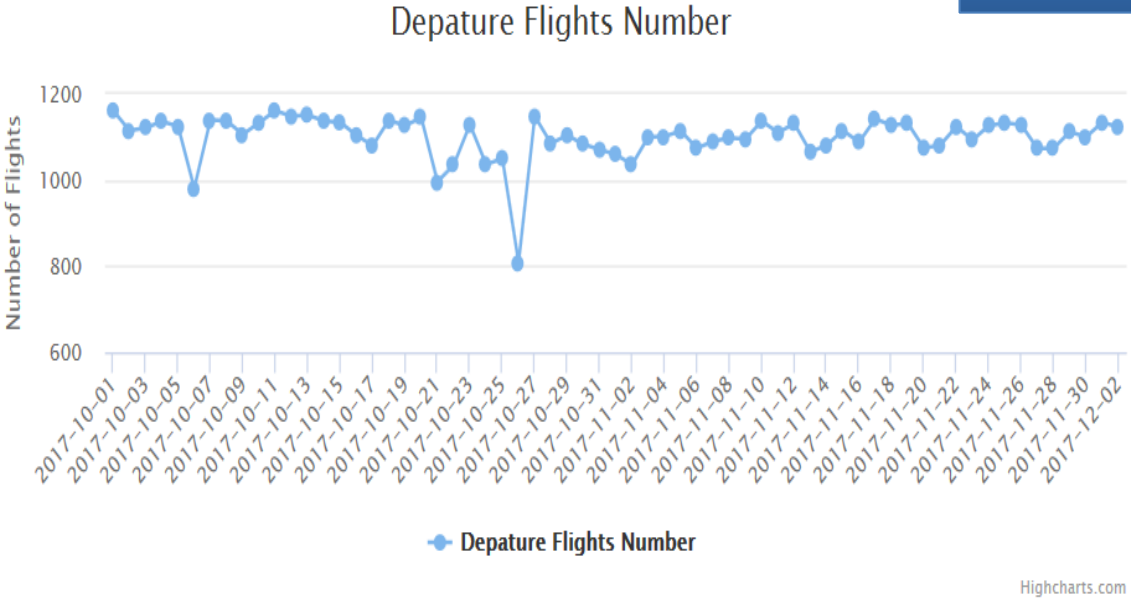
Flight Information App

International Departures and Arrivals Madagascar

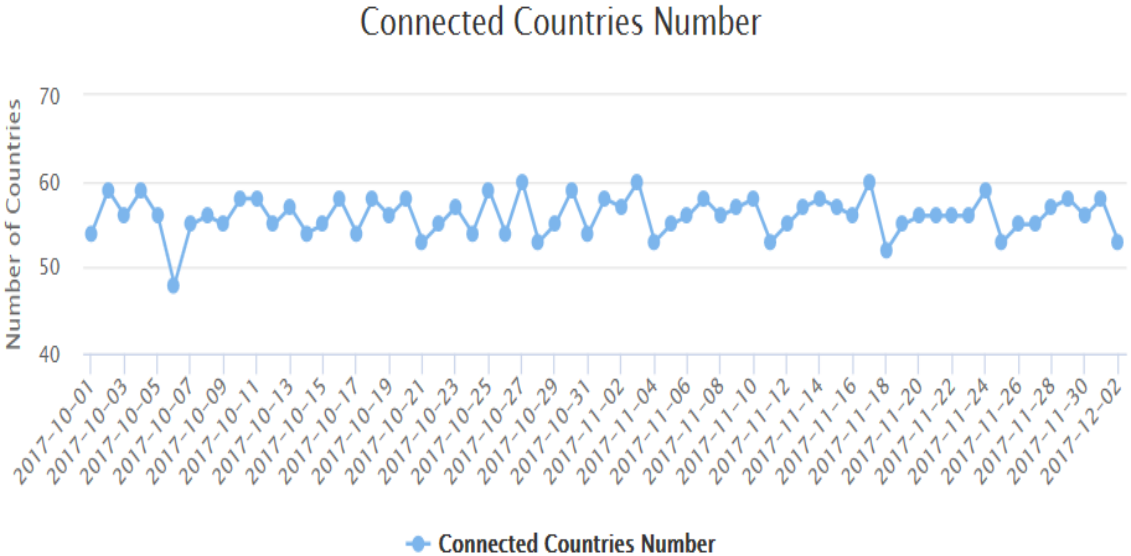


Flight Information App

Depature Flights Number



Connected Countries Number





Flight Information App

Highcharts.com

List of Connected Country or Region

Show entries

State or Region	Number
Japan	15358
Thailand	9333
Korea	8912
USA	5277
Singapore	3810
Malaysia	3775
Vietnam	3488
Philippines	2179
Indonesia	1550
Australia	1484

Showing 1 to 10 of 71 entries

List of Connected Airport

Show entries

Airport	Number
RKSI	6434
VTBS	4529
RJBB	4413
RJAA	4035
WSSS	3788
WMKK	2685
RJTT	2191
VTBD	1726
VVTS	1547
RPLL	1499

Showing 1 to 10 of 212 entries

Flight Information App

Details on Departures and Destinations

Proceeding 7 days

(2018-02-20 -- 2018-02-26)

Show entries

Destination Country / Territory	Departures (7 days)	Growth (Compare to Reference Week)
UAE	24	+140.0%
UK	22	+15.8%
Ethiopia	19	-9.5%
Egypt	16	-11.1%
Turkey	14	+16.7%
France	11	+10.0%
Germany	9	-18.2%
Ghana	7	-30.0%
Netherlands	7	+16.7%
South African Rep	7	+16.7%

Showing 1 to 10 of 25 entries

Previous 2 3 Next

Show entries

Destination Airport	Departures (7 days)	Growth (Compare to Reference Week)
EGLL / Heathrow / UK	21	+10.5%
HAAB / Bole Intl / Ethiopia	19	-9.5%
OMDB / Dubai Intl / UAE	18	+200.0%
HECA / Cairo Intl / Egypt	16	-11.1%
LTBA / Ataturk / Turkey	14	+16.7%
LFGP / Charles-De-Gaulle / France	10	0
EDDF / Frankfurt/Main / Germany	9	-18.2%
DGAA / Kotoka Intl / Ghana	7	-30.0%
EHAM / Schiphol / Netherlands	7	+16.7%
FAOR / O.R. Tambo Intl / South African Rep	7	+16.7%

Showing 1 to 10 of 32 entries

Previous 2 3 4 Next



Flight Information App

Indicators Comparison

Select a day: Compare with the week start from:

The Day **2018-02-26** compare to the week start from **2018-02-19**

Country or Territory Comparison
Show entries

Arrival Country or Territory	Flight Number	
UK	3	↑(+0)
Ethiopia	3	↑(+1)
UAE	3	↑(+0)
Germany	2	↑(+0)
Egypt	2	↑(+0)
France	2	↑(+0)
Turkey	2	↑(+0)
Togo	1	↑(+1)
Ghana	1	↑(+0)
Ivory Coast	1	↑(+1)

Country or Territory Number
16 (+0)

Flight Number
26 (+1)

Showing 1 to 10 of 16 entries Previous 2 Next

NOTAMS Information

tags for plague: plague, bubonic, pneumonic, Yersinia pestis (bacterial species)
 tags for ebola: ebola, haemorrhagic, fever, Filoviridae
 tags for yellow fever: yellow fever, virus, mosquito
 tags for diseases in general: contagious, disease, infection, outbreak, epidemic, bacteria, virus, protozoa
 tags for diseases + aviation: quarantine, isolate, infect

A0118/18 - GMFF (Morocco)

AERODROME

Period: 2018-02-26T00:00:00.000Z - 2018-05-27T00:00:00.000Z

Q-Code (EAHW):

*BUILDING WORK OF PARKING STAND ISOLATED AT 350M EAST OF SHOULDER STRAP L PRESENCE PERSONS AND EQPT. CAUTION RECOMMENDED.
 CREATED: 26 Feb 2018 10:29:00 SOURCE: GMMMYNYX*

A0070/18 - FLFI (Zambia): Not listed Plain language

FIR

Period: 2018-02-24T00:00:00.000Z - 2018-05-24T00:00:00.000Z

Q-Code (XXXX): Other Information Other Information Not listed Plain language Other

IN VIEW OF THE ONGOING EBOLA OUTBREAK,ZAMBIA CIVIL AVIATION AUTHORITY IS REQUESTING ALL AIRMEN TO REPORT MEDICAL STS OF THEIR PAX FOR ALL INBOUND FLIGHTS AND TO COMPLY WITH HEALTH SCREENING OF PAX ENTERING THE ZAMBIAN AIRSPACE. CREATED: 24 Feb 2018 06:29:00 SOURCE: FLKKYNYX



Regional impact and influence

Communities involved and affected by airport

(Public) transport, parking, access

Workforce – stationary (at airport) and airborne

Feed and waste infrastructure and logistics

Landside infrastructure and operations

Airside infrastructure and operations

Based on the Healthy Cities research and community engagement process CHETRE found that a Healthy Airport can embrace twelve aspirational dimension (below). Each of these has a geo-spatial dimension.

The health impacts and potentials of an airport do not stop at its fence and can be seen as a footprint that reaches beyond the visual horizon.

These views were presented to key stakeholders in the global aviation industry at an international conference where ICAO (the International Civil Aviation Organization) and ACI (Airports Council International) saw these ideas as a new stage in airport and metropolplex evolution.

Healthy Airports

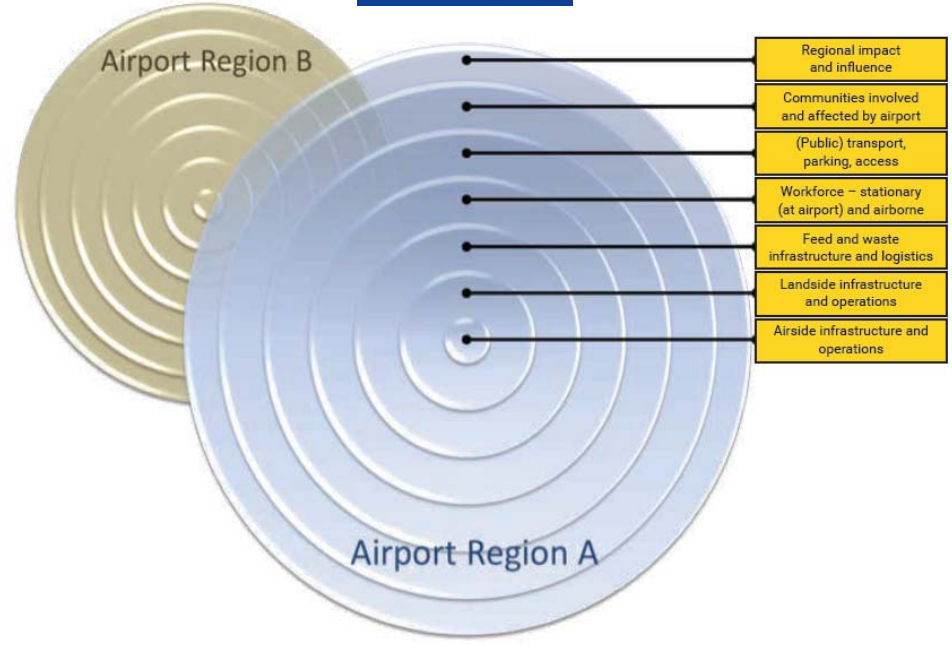


Figure 1. Geopolitical and geographical scale dimensions within a metropolplex setting



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Healthy Airports



- Aviation sector assists with managing the public emergency response
 - Data for risk assessment
 - Dissemination of information
 - Transport links to manage the event
- Collaboration needed to sustain economy
 - Business continuity during public health events
 - Sustain travel, trade and tourism



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Global conferences & commitments



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3-4 December 2018 - Musée des Confluences - Lyon, France

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ICAO CAPSCA Project Manager

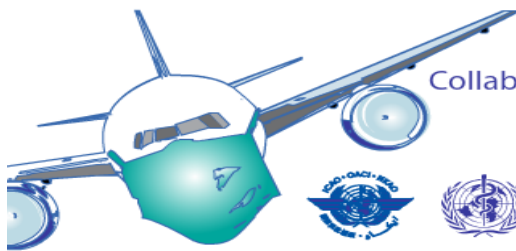
- Negotiate and contract with Partners to support the CAPSCA and ICAO leadership of CAPSCA
- Development of a business case for the roll out of a CAPSCA programme lead by ICAO
- Support capacity building in CAPSCA and MED
- Support CAPSCA Online and Social Media
- Support Development of Regional ICAO Events and Training Initiatives



International Civil Aviation Organization Individual Consultant (IC) Vacancy Notice

Position Information

Title	2018/71/IC Project Manager - Aviation Medicine	Vacancy notice	2018/10848/IC
Level	Band A	Posting period	2018-10-18 to 2018-10-25
Duty station	Montreal	Date for entry on duty	As soon as possible



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THANK YOU

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