

CENTRAL FUND FOR INFLUENZA ACTION FINAL PROGRAMME¹ NARRATIVE REPORT

Programme Title & Project Number

- Programme Title: Cooperative Arrangement for the Prevention of Spread of Communicable Disease by Air Transport (CAPSCA)
- Programme Number (if applicable): CFIA/A14
- MPTF Office Project Reference Number:

Participating Organization(s)

• Organizations that have received direct funding from the MPTF Office under this programme:

International Civil Aviation Organization (ICAO)

UNCAPAHI Objective

Country/Region Americas

Thematic/Priority Continuity under Pandemic Conditions

Implementing Partners

- National counterparts (government, private, NGOs & others) and other International Organizations:
 - 1. WHO
 - 2. Governments/international airports that have received a CAPSCA assistance visit
 - 3. IATA
 - 4. ACI
 - 5. Several others, to a lesser extent

Programme/Project Cost (US\$)

CFIA Contribution: \$399,960

• by Agency (if applicable)

Agency Contribution

• by Agency (if applicable)

Government Contribution (if applicable)

Other Contributions (donors) (if applicable:) In kind

contributions from partners

TOTAL: \$399,960

Programme Duration (months)

Overall Duration 48

(months)

Start Date²

31.12.2008

(dd.mm.yyyy)

End Date

31.12.2012

(or Revised End

Date)3

Operational Closure

Date⁴ 31.12.2012

Expected Financial

Closure Date

31.05.2013

¹ The term "programme' is used for programmes, joint programmes and projects.

² The start date is the date of the first transfer of the funds from the MPTF Office as Administrative Agent. Transfer date is available on the MPTF Office GATEWAY.

³ As per approval by the relevant decision-making body/Management Committee.

⁴ All activities for which a Participating Organization is responsible under an approved MPTF programme have been completed. Agencies to advise the MPTF Office.

Final Programme/ Project Evaluation

Evaluation Completed

Yes Date: April 2012

 $\label{eq:evaluation} Evaluation \ Report-Relevant \ part \ inserted \ into \ narrative.$

Submitted By

Name: Dr Anthony Evans

o Title: Chief, Aviation Medicine, ICAO

o Participating Organization (Lead): ICAO

O Contact information: aevans@icao.int

o Tel +1 514 954 8150

EXECUTIVE SUMMARY

The Cooperative Arrangement for the Prevention of Spread of Communicable Disease by Air Transport (CAPSCA) Americas project provides a multi-sector platform that is unique in the aviation sector. It brings together personnel working in both the aviation and public health sectors to develop, improve and implement, in States and at individual international airports, preparedness plans for a public health emergency that impacts the aviation sector and economies and businesses that depend on it. In CAPSCA the public and private sectors collaborate to ensure that all viewpoints are considered. The main partners are: World Health Organization (WHO); International Air Transport Association (IATA), and Airports Council International (ACI).

The main achievements of CAPSCA in the Americas (and other) regions have been the development of ICAO Standards and Recommended Practices (SARPs) and associated guidance material, the development of a process for auditing States on the implementation of the SARPs (which will commence in 2013), the development of public health/aviation networks at a global, regional, State and operational level, and the acceptance by many in the aviation and public health communities that public health emergency preparedness in the aviation sector is worthy of more attention than it was given previously.

During 2012 CAPSCA continued to develop in the Americas region. Four additional States joined the project (making a total of 32, representing 90% of States in the region); a regional meeting was held; Assistance Visits to 10 States/international airports were performed.

I. PURPOSE

a. Introduction

CAPSCA is an International Civil Aviation Organization (ICAO) global programme to improve preparedness planning and response to public health events that affect the aviation sector, such as an influenza pandemic. During the life of the project, work done to prepare for a communicable disease pandemic was found to also be largely applicable to other types of public health emergency, such as a nuclear power-plant accident.

ICAO has worked closely with States, the World Health Organization, the International Air Transport Association, Airports Council International and other partners, to develop provisions on public health emergency preparedness in a number of Annexes to the Convention on International Civil Aviation i.e. Annex 6 — *Operation of Aircraft*, Annex 9 — *Facilitation*, Annex 11 — *Air Traffic Services*, Annex 14 — *Aerodromes*, Annex 18 — *The Safe Transport of Dangerous Goods by Air*, as well as *Procedures for Air Navigation Services* — *Air Traffic Management*. Guidance material has been produced to support these provisions. In October 2010 the ICAO Assembly adopted a Resolution that urged States to join CAPSCA.

Public health events are often multi-sectoral and international in nature, and should therefore be managed at several different levels: operational, national, regional and global. CAPSCA provides a platform that facilitates such management. During the life of the project, CAPSCA's goal has been expanded to address all types of public health events, not only communicable disease.

b. Main outputs

- i. Amendment of ICAO Standards and Recommended Practices on public health preparedness
- ii. Guidance provided for States, airport and aircraft operators, in collaboration with WHO and industry representative bodies
- iii. Inclusion of preparedness planning in ICAO State audit process
- iv. Thirty-two States have joined the CAPSCA project in the Americas region. They are: Argentina, Bahamas, Barbados, Belize, Bolivia (Plurinational State of), Brazil, Canada, Chile, Colombia, Costa Rica, Cuba, Curaçao, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, Trinidad and Tobago, Turks and Caicos Islands, United States, Uruguay and Venezuela (Bolivarian Republic of). Of these, four States joined in 2012.
- v. Twenty eight airports have received Assistance Visits (AV), including 10 during 2012.
- vi. The CAPSCA Americas project was presented at a number of regional meetings during 2012, including: (a) ICAO/LACAC Regional Facilitation Seminar, Santiago, Chile, 20 22 March 2012; (b) ICAO/LACAC Regional AVSEC Seminar, Antigua and Barbuda, 14 15 May 2012; (c) Central America DGCA Meeting, Mexico City, Mexico, 22 24 May 2012; (d) Central Caribbean Directors of Civil Aviation Meeting, Punta Cana, Dominican Republic, 9 12 July 2012.
- vii. The third CAPSCA global coordination meeting was held in Santiago, Chile, during 8-12 October. There were 110 participants from 32 States/Territories, seven International Organizations and two members of industry 30 conclusions were agreed, available at: http://www.capsca.org/GlobalAmericas2012.html

c. Relationship to the Strategic (UN) Planning Framework guiding the operations of the Fund.

This CAPSCA project (one of four) supports Objective 6 of the UN System Consolidated Action Plan for Avian and Human Influenza i.e. *Continuity under Pandemic Conditions*

d. Primary implementing partners

- i. WHO
- ii. Governments/international airports that have received a CAPSCA assistance visit
- iii. IATA
- iv. ACI

II. ASSESSMENT OF PROGRAMME/PROJECT RESULTS

a. Key outputs

CAPSCA has increased awareness amongst public health and aviation officers of the need to communicate and collaborate in a cross-sectoral manner. As a result, flight safety is improved as preparedness plans are developed that address the potential absence of safety critical personnel. There are benefits to human health as the aviation sector plays its part in minimizing and managing the spread of disease by air transport, and the adverse effects of public health emergencies on economies of States and the aviation industry is mitigated.

A number of regional seminars have been organised that have brought together many different stakeholders to help develop harmonized Standards and guidelines and in this process

networks have been established. Nineteen States have expressed support for CAPSCA by joining the project and eleven assistance visits to international airports in the region have been undertaken.

b. The networks established by the four CAPSCA projects proved invaluable during two major public health emergencies that have occurred during recent years i.e. the Influenza A (H1N1) pandemic, and the Fukushima nuclear powerplant accident. Although the latter type of emergency was not included in the original mandate for CAPSCA it was found that the networks established for a communicable disease very effectively formed the basis for communication and collaboration during the aftermath of the Fukushima accident.

With respect to institutional changes, ICAO has included public health emergency planning as a topic to be addressed in both aerodrome and air traffic management emergency planning documents. Several other ICAO Annexes (and associated Procedures) to the Convention on International Civil Aviation have been amended, which will lead to long term adjustments to preparedness planning in the aviation sector. A process for auditing States on the implementation of the SARPs has been developed (which will commence in 2013) – it will form part of the ICAO Universal Safety Oversight Audit Process.

- c. The project supports Objective 6 of the UN System Consolidated Action Plan for Avian and Human Influenza i.e. *Continuity under Pandemic Conditions*.
- d. The main partner for CAPSCA is WHO, at a global level (collaboration between headquarters); regional level (collaboration between the regional offices of WHO and ICAO), and national level (collaboration between the WHO national focal point/WHO country team and the national civil aviation regulatory authority). Since public health preparedness planning in the aviation sector requires the input of both the public health and aviation sectors, without the support of WHO, CAPSCA would not have been very effective at bringing about the changes that it has.
 - Other key partners are ACI and IATA, providing essential inputs from industry.
- e. The main beneficiaries of the CAPSCA Americas project have been the 28 international airports and their States/Administrations that have received an assistance visit (AV). The project has trained a number of technical advisers (TAs) from States and from ICAO regional offices who can undertake such AVs. CFIA funds were used to provide travel and subsistence for each AV team, which, ideally, comprises a representative from both the public health and aviation sectors.
- f. The main partners have been listed above, but there are a number of others who have contributed to the project to an important, but lesser degree. These are: US Centers for Disease Control and Prevention; Office for the Coordination of Humanitarian Affairs; World Food Programme; International Organization for Migration; World Tourism Organization; Food and Agriculture Organization; World Organization for Animal Health. All have played a part in helping to build CAPSCA into a global programme, consisting of four separate but harmonized CFIA projects of which CAPSCA Americas is one.
- g. The great majority of funding for CAPSCA has been from the CFIA, supported by contributions in kind from States and international organizations. A small amount of funding for 2013 and beyond has been provided from efficiency savings at ICAO and by States. For the moment, it cannot be said that CFIA *per se* has (yet) attracted additional funding.

III. EVALUATION & LESSONS LEARNED

a. An external evaluation and lessons learned exercise was undertaken externally on behalf of the CFIA. Please see below for the relevant extract:

"The ICAO supported intervention on Cooperative Arrangement for the Prevention of Spread of Communicable Disease through Air Travel (CAPSCA) Background

Air travel is an important mode for the transmission of communicable diseases that may result in a public health emergency of international concern. Regardless of the geographical location that becomes affected first, there exists the potential for rapid spread to pandemic proportions along with all of the associated harmful socio-economic consequences. Transporting over two billion passengers per year, the aviation sector is in the forefront of managing this risk, necessitating its active engagement in preparedness and response to such disease outbreaks. The CFIA support has enabled ICAO to contribute to this emerging need and actively engage in improving the preparedness of the aviation sector. This has included the participation of national authorities and private sector representative bodies aiming to reduce the risk of avian and human influenza (AHI) and other communicable diseases. Although this is a core mandate of ICAO, the necessary capacities to undertake this function were relatively weak until the CFIA support materialized.

Pandemic preparedness in the aviation sector

To address the challenge of AHI pandemic risk in 2006, the International Civil Aviation Organization (ICAO) launched the Cooperative Arrangement for the Prevention of Spread of Communicable Disease through Air Travel (CAPSCA). The CAPSCA initiative aimed to bring all stakeholders together, especially the aviation and public health sectors, and created a collaborative platform for the development and implementation of the relevant ICAO Standards and Recommended Practices (SARPs), along with supporting procedures and guidance material.

As the CAPSCA programme evolved, it quickly became clear that the main initial challenge was to change the culture of stakeholders and to persuade aviation sector personnel to ascribe public health emergency planning a higher level of priority and to encourage public health officials to consider aviation sector preparedness planning in greater detail. The CAPSCA management team decided to minimize the use of relatively costly consultant contracts and instead utilize experts seconded from States and International Organizations. Such were loaned to the project on a part time basis with no additional salary cost to the programme. This proved to be a successful strategy and by utilizing such experts, with support from technical staff in the ICAO Regional Offices, a cadre of expertise was established in each region, at relatively little cost. In addition, by involving permanent staff in different States, a degree of continuity was ensured, an effect more difficult to achieve by external consultants. CFIA funds were therefore used primarily to fund meetings, workshops, interpretation/translation and assistance visits to States. This enabled the CAPSCA initiatives in each region to continue their work for longer than anticipated at the outset of each CFIA CAPSCA project, and permitted their end dates to be extended without requiring additional finance from CFIA. That a longer-term approach to capacity building could be adopted proved advantageous - more time was available in which to make the substantial changes necessary to ICAO Standards and Recommended Practices and associated audit protocols, and to write supporting guidance material for implementing the SARPs, so that preparedness planning in the aviation sector could be put on to firm footing and inter-agency networks could be developed.

An additional major goal of CAPSCA has been the implementation of the World Health Organization's International Health Regulations (IHR) 2005 at Points of Entry, in particular at international airports. The CAPSCA initiative has evolved from the requirements of ICAO member States for enhancing preparedness capacities of their civil aviation industry to minimize the spread of communicable disease by air travel, a function only ICAO could provide because of the complexity of interactions between national, regional and international stakeholders, infrastructure, coordination and networking and specialized technical expertise.

CAPSCA regional cooperation

CAPSCA was first launched in the Asia Pacific region in 2006, to establish an effective and sustainable implementation platform in which the aviation and public health sectors could closely collaborate. The programme was subsequently extended to other regions, thus creating a Global CAPSCA to facilitate harmonized pandemic preparedness planning and implementation within the global aviation framework for any public health emergency, or potential emergency of international concern. The established ICAO regional structure, including its seven regional offices, has enabled the CAPSCA programme to assume a global vision and generate regional capacities ready to provide multifaceted technical, managerial and organizational support to the member States through a unified and standardized set of operational guidelines for action. To assist this, identical terms of reference have been outlined for each CAPSCA Regional Steering Committee and their associated technical teams. To facilitate the convergence of the roles of ICAO, public health team leaders and authorities, civil aviation authorities, WHO and donor partners, regular CAPSCA technical assistance visits for gap analysis, capacity building, coordination, introduction and implementation of protocols have been carried out. The global CAPSCA organizational structure is summarized in the figure outlined below.

Donors **Partners Organizations ICAO Project Manager** Agencies & States (WHO, IATA, ACI, UNWTO, Chief, Aviation Medicine (UN CFIA & others OCHA, IOM, WFP and CDC) **Technical Advisor and state** ICAO Project Administrator chief Medical officers and coordination **Regional CAPSCA Regional Aviation ICAO Regional Offices** Steering Committee Medicine and Public **Regional Coordinators** Chairpersons **Health Team Leaders** States Civil Aviation **Regional Aviation** Authorities & Public Medicine and Public Health Team **Health Authorities Technical Advisors**

Figure 16: ICAO CAPSCA Global Organization

Figure 16: ICAO CAPSCA Global Organization

The CAPSCA AHI pandemic preparedness operations

The CAPSCA intervention has encouraged regions and member States to strengthen their AHI pandemic preparedness plans in close collaboration with civil aviation and public health authorities in compliance with ICAO SARPs and WHO IHR (2005) and to perform simulation exercises to validate the effectiveness of such plans. In this regard, efforts were made to engage the member States in building the regional and national capacities through professionally organized training programmes. Governments were also encouraged to nominate experts to join the ICAO CAPSCA Regional Aviation Medicine and Public Health Teams (RAMPHT) to be trained by ICAO to subsequently undertake State and Airport Assistance Visits in the States and territories participating in the programme.

Through its interventions and with the support of WHO and its regional offices, CAPSCA has strengthened national and regional communication and collaboration between the public health and aviation sectors and built proactive coordinated plans effectively capable of managing public health emergencies in the aviation sector. Moreover, guiding principles were set as normative standards to be followed by the civil aviation authorities at every level, in collaboration with the Airports Council International and the International Air Transport Association (IATA), the trade associations for airports and airlines respectively. Through this collaboration, CAPSCA emergency preparedness and response plans have supported the implementation of the Standards and Recommended Practices of ICAO. This has facilitated the implementation of CAPSCA core interventions of assessment, planning, training and monitoring in the regions by national civil aviation authorities, in close collaboration with health experts engaged in the prevention and management of public health emergencies. These interventions have scaled up both the capacity and the ownership of CAPSCA among the concerned responsible institutions. The programme has operated both at a technical level, considering it to be an essential component of the Whole-of-Society preparedness and also at management level to improve commitment at the higher executive levels of the engaged organizations. Harmonized development of preparedness plans at airports in different regions has been facilitated by the use of standardized checklists and templates, and simulation exercises that have tested the implementation of preparedness plans. The formal and mandatory ICAO safety oversight audit programme has been amended to include questions that address public health emergency planning.

ICAO Assembly Resolution A37-13: Prevention of spread of communicable diseases through air travel

A number of ICAO Assembly resolutions have outlined the role of the State in taking effective measures to prevent and manage the spread of communicable diseases of international concern by means of air navigation and ensure the protection of the health of passengers and crew members on international flights. To consolidate these efforts and substantiate the CAPSCA capacity to improve and harmonize preparedness plans, resolution A37-13 was adopted by the ICAO Assembly in 2010, calling for public health and aviation sectors in member States to collaborate and develop national preparedness plans for the aviation sector, addressing public health emergencies of international concern and integrating them with the general national preparedness plans. These plans need to be founded on scientific principles and guidelines jointly set by ICAO and the World Health Organization. The resolution urges member States to involve all the relevant stakeholders such as airport operators, aircraft operators and air navigation service providers in the development of the national aviation sector preparedness plans and encourages them to join the CAPSCA initiative to ensure the attainment of its goals. Such goals are detailed in the provisions of ICAO Annexes (and associated documents) to the Convention on International Civil Aviation and include improvements in the following areas: collaboration between civil aviation and public health authorities; procedures to deal with suspected communicable disease on board; reporting to air traffic controllers (ATCs) of public health events on board, the communication link of such events from ATC to aerodrome operators and public health authorities at destination; and integration of public health emergency planning in the aviation sector with general public health emergency planning.

Aligning CAPSCA with the six pandemic phases

To align its efforts with the WHO global six pandemic phases, CAPSCA has developed a similar phasing relevant to the aviation sector, whereby the first three pandemic phases are combined by the aviation sector under the "Alert Green phase", while phases four, five and six are labelled as "Alert Yellow; Alert Orange and Alert Red Phases". At the Alert Green Phase, CAPSCA recommends to step up vigilance and make preparations to meet the potential threat; periodically reviewing and testing the national aviation preparedness plans; maintaining all the equipment identified for use; training relevant personnel and familiarising them with the plan and its activation; testing the communication plan and coordinating the effort of the aviation authority through its Crisis Management Team (CMT), especially the measures at the airport to be

carried out under the overall guidance of the state. During the Alert Yellow Phase, the measures adopted during the Alert Green Phase are to be maintained. Moreover, Health Alert Notices (HANs) are to be distributed to travellers, the necessary supplies for HANs ensured and flights randomly tested for HANs distribution. During the Alert Orange Phase, measures to be adopted include the distribution of Health Declaration Forms (HDFs); Passenger Locator Forms (PLF) used for contact tracing; travellers screening when recommended by WHO or the State; referring suspect and exposed contacts to the designated health service provider or public health office; medical protocols used for screening to accord with State health authority recommended measures when suspected cases arrive on flights; communications between the airline operating agency and airport/airport operator or authority (as determined by the State) and Standard Operating Procedures detailed in the preparedness plan, while WHO guidelines for case management of Influenza A (H1N1) in air transport is to be applied. In the "Alert Red Phase" all measures under "Alert Orange" will be sustained unless put off by the State; mitigation of the impact of the pandemic will be prioritized and screening measures at the airport may progressively be deactivated. Distribution of HANs to travellers may continue, while preserving essential services and resources.

CAPSCA beyond AHI pandemic preparedness action

During the Fukushima Daiichi nuclear power plant accident on 11th March 2011, the previously established CAPSCA networks were useful for managing the aviation response to radiation risks posed to aircraft and travellers. ICAO coordinated the response of the transport sector, including maritime, by means of a task force of seven UN agencies and two international organizations. This task force worked closely with International Atomic Energy Agency, World Health Organization, World Meteorological Organization, International Maritime Organization, and others, to address issues related to air traffic control over Japan and the potential health risks associated with travel to and from the country, as well as topics such as screening of goods and passengers from Japan arriving by sea or air in other countries. As a result of the task force work, consensus was reached during a very short period, resulting in three news releases having the support of all participants. This effective coordination was greatly assisted by the successful implementation of the CAPSCA programme prior to the accident.

Lessons to draw

Through the experience of the implementation of CAPSCA programme, several valuable lessons were drawn:

- Through the ICAO leadership and CFIA support, a unique CAPSCA programme, the only one of its kind addressing the international challenge of preventing the spread of communicable diseases through air transport, was successfully launched in all regions.
- The programme attracted and continues to attract the participation of a growing number of member States.
- CAPSCA established strong collaborative linkages and coordination between the public health and aviation sectors, including both State and private enterprises, enhancing the preparedness capacity at regional and national levels.
- Effective preparedness and response to public health emergencies in the aviation sector require efficient communication and collaboration between all stakeholders, and the commitment of higher levels of management responsibility.
- The CAPSCA preparedness activities have been mainstreamed into the core functions of ICAO, substantiated by the 2010 ICAO Assembly resolution on the subject that provides a legacy of sustainability and funding opportunities.
- The capacity of CAPSCA to address all public health hazards that may affect the aviation sector was demonstrated.
- The extensive technical tools and operational methods developed by CAPSCA constitute a valuable investment in the sector."

b. This project was originally planned to have a finite lifespan, but developed into long-term effort that, even though CFIA funding has ceased, will continue into the future.

The main challenges were two fold – to develop an efficient cross-sectoral network, particularly between the public health and aviation sectors, and to persuade high level management that public health emergency preparedness in the aviation sector is worthy of careful consideration.

It was decided at an early stage that paid consultants would not be hired for CAPSCA, as the aim was to change working processes of officers already in post: rather in-kind contributions would be sought from States and international organizations. The challenge was to change the hearts and minds of those involved, which takes considerable time and effort, but when achieved is likely to have a longer lasting effect than that obtained using consultants.

In general, success has been achieved to a degree – in some areas the results have been outstanding, in others less so. Some good networks have been established, but these are often not yet well institutionalized – they are based on personal contacts and so there is a risk that in future, when present incumbents retire or move on, the network will dissolve. Arrangements are therefore ongoing to try and formalize inter-sectoral working arrangements at all levels. Also, although in some States, organizations and companies, there has been good high level "buy-in" of the CAPSCA philosophy, such an approach has not been adopted universally.

c. Were the project to be re-started, little needs to be changed in terms of its management. A project originally envisaged as short-term has developed into one that should provide long term, ongoing, benefits, assuming that some future finding sources can be obtained.

At times, it has proven to be challenging to obtain the encouragement for CAPSCA by some of the major stakeholders, which in turn has made it challenging for the aviation and public health sectors to work together efficiently. Public health officers can see aviation issues as low priority, and *vice versa* and at a technical level professionals may need encouragement from their superiors to facilitate collaboration in what to many is a relatively novel work area. Where collaboration has been fully supported by both sectors, the results have been extremely positive.

An observation can be made is that at a UN level, there has been less teamwork between the agencies during an emergency than anticipated. For example there does not appear to be any system in place for a communication process that enables different UN agencies to work together to ensure that a timely and consistent message is delivered to the public by all agencies, during an emergency. On a personal level and on an ad hoc basis, support is usually provided, but systems/procedures could be developed further.