

Hello Tomorrow



# Status Quo and Initiatives: Alpha-numeric Call-Signs in the ICAO MID Region - ...and **elsewhere...**

Ekkehard Gutt  
Emirates

# Today's Agenda



## ATC Call Sign-Similarity and –Confusion:

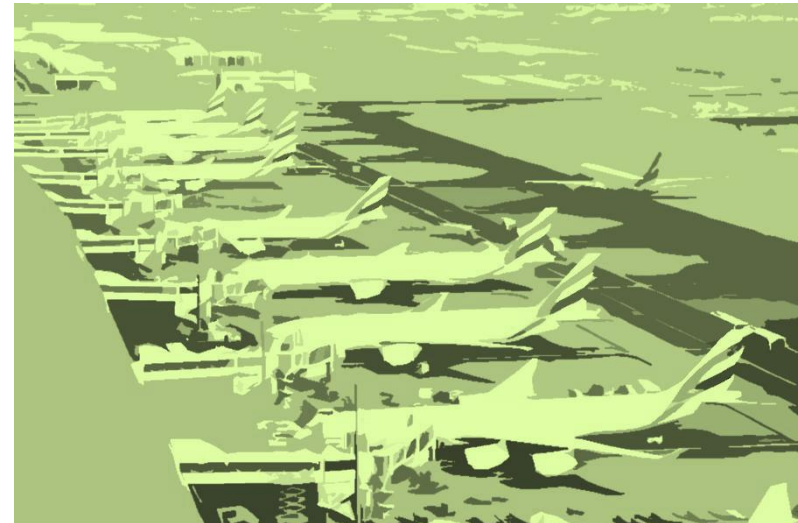
- Status Quo: ICAO MID Region
- Emirates: Review and Initiatives
- EK Global Survey
- Supporters & Stakeholders
- The way forward: Global Initiatives
- The Challenges
- Outlook

# Status of the ICAO MID Region



The ICAO Middle East Region as an entire region is not yet ready for the full acceptance of alpha-numeric ATC Call-Signs...

**...BUT major work/initiatives are ongoing!**



# EK-Initiatives to move to using alpha-numeric call-signs



- Active Involvement in the U.A.E. National Airspace Advisory Committee/ NASAC Working Group 7;
- Conduction of an “Alternate Call-Sign Trial” with Dubai TWR/Approach, where tactical call-sign changes could be initiated by both, ATC as well as the Flight Crew;
- Creation of awareness at the EK Commercial Planning department to coordinate the intended new/upcoming call signs beforehand;
- Development of an EK internal Call-Sign Conflict Overview tool;
- Storage of any similar call-sign where EK flights are involved from any ANSP unit globally.
- Liaison with our Flight Planning System provider to discuss the system handling of ‘ATC Call-Signs’ (in parallel to the commercial call-signs);
- Liaison with other EK System Service Providers to discuss handling of alpha-numeric call-signs (FMS, ACARS, Ops System, Interfaces, etc. etc.);
- Dialogue started with other Airlines that make use of “ATC Call Signs”;
- Identifying challenges/problems of using separated ATC Call-Signs within EK (departments, systems, tools);
- Identifying challenges/problems of using separated ATC Call-Signs with ATC, Overflight Permissions, Landing Permissions, Airport Systems;
- Collecting documentation/literature in regards to call-sign confusion (examples, trials, practices, human factor issues etc.);
- Collecting data/information from other Airlines;
- Collecting data/information from ATC units;
- What prevents us from doing this immediately are problems in many ICAO Regions and individual stakeholders (beside of ATC) to accept alpha-numeric call-signs e.g. for overflight approvals, landing approvals, airport slots and in the Airport environment itself (e.g. commercial flight number information on airport board displays);
- EK has initiated a survey and has distributed this to several internationally operating Airlines (- this survey will be shared at a later stage with you); it is of concern that foreign Airlines pointed out, that they were not able to apply for alpha-numeric call-signs e.g. in the U.A.E..;
- EK will move to alpha-numeric call-signs as soonest as possible, but only when it is assured, that all stakeholders involved in the particular flights fully accept the filing/use of ATC alpha-numeric call-signs;
- EK raises a Working Paper today (06MAY14) at the IATA MENA RCG to request compliance of all stakeholders in the Middle East Region to comply/accept with alpha numeric ATC call-signs;
- EK requests the set-up of a checklist, where all stakeholders (in the U.A.E.) have to confirm compliance/acceptance with the use of alpha-numeric ATC call-signs;



# EK: Global Airline Survey (April 2014)



EK Flight Operations Support  
**-Call-Sign Confusion-  
 Use of alpha-numeric Call-Signs**  
 (Airline Survey APR' 2014)

EK Flight Operations Support  
**-Call-Sign Confusion-  
 Use of alpha-numeric Call-Signs**  
 (Airline Survey APR' 2014)

EK Flight Operations Support  
**-Call-Sign Confusion-  
 Use of alpha-numeric Call-Signs**  
 (Airline Survey APR' 2014)

## Airline Survey

### -Aircraft Call-Sign Confusion- and -Use of alpha-numeric Call-Signs-

(→ Survey Period: April 2014)

5.3. Are you using 'alpha-numeric' ATC call-signs (in parallel to the numeric (commercial) call-sign)?

a) Europe:  
 b) Asia & Pacific:  
 c) Africa:  
 d) North America:  
 e) South America:  
 f) Middle East:

The following table indicates the number of Airlines specifically pointing out problems in obtaining call-signs (number of voting in brackets).

Region	Yes	No
Europe	10 (10)	1 (1)
Asia & Pacific	10 (10)	1 (1)
Africa	10 (10)	1 (1)
North America	10 (10)	1 (1)
South America	10 (10)	1 (1)
Middle East	10 (10)	1 (1)

5.4. Have you experienced problems when making use of alpha-numeric call-signs?

The following table indicates the number of Airlines specifically pointing out problems in obtaining call-signs (number of voting in brackets).

Region	Yes	No
Europe	10 (10)	1 (1)
Asia & Pacific	10 (10)	1 (1)
Africa	10 (10)	1 (1)
North America	10 (10)	1 (1)
South America	10 (10)	1 (1)
Middle East	10 (10)	1 (1)

6.) Have you experienced problems (in cockpit/cabin) when using 'alpha-numeric ATC call-signs' (in parallel to the numeric (commercial) call-sign with Aircraft internal applications)?

7.) Have you experienced problems when making use of 'alpha-numeric' ATC call-signs in the Airport environment? (i.e. did Airports report problems in their systems/messaging when Airlines make use of an 'commercial' (numeric) call-sign in parallel to an 'alpha-numeric' ATC call-sign?)

8.) Should you have not considered to make use of alpha-numeric ATC call-signs, what is the main reason for this?

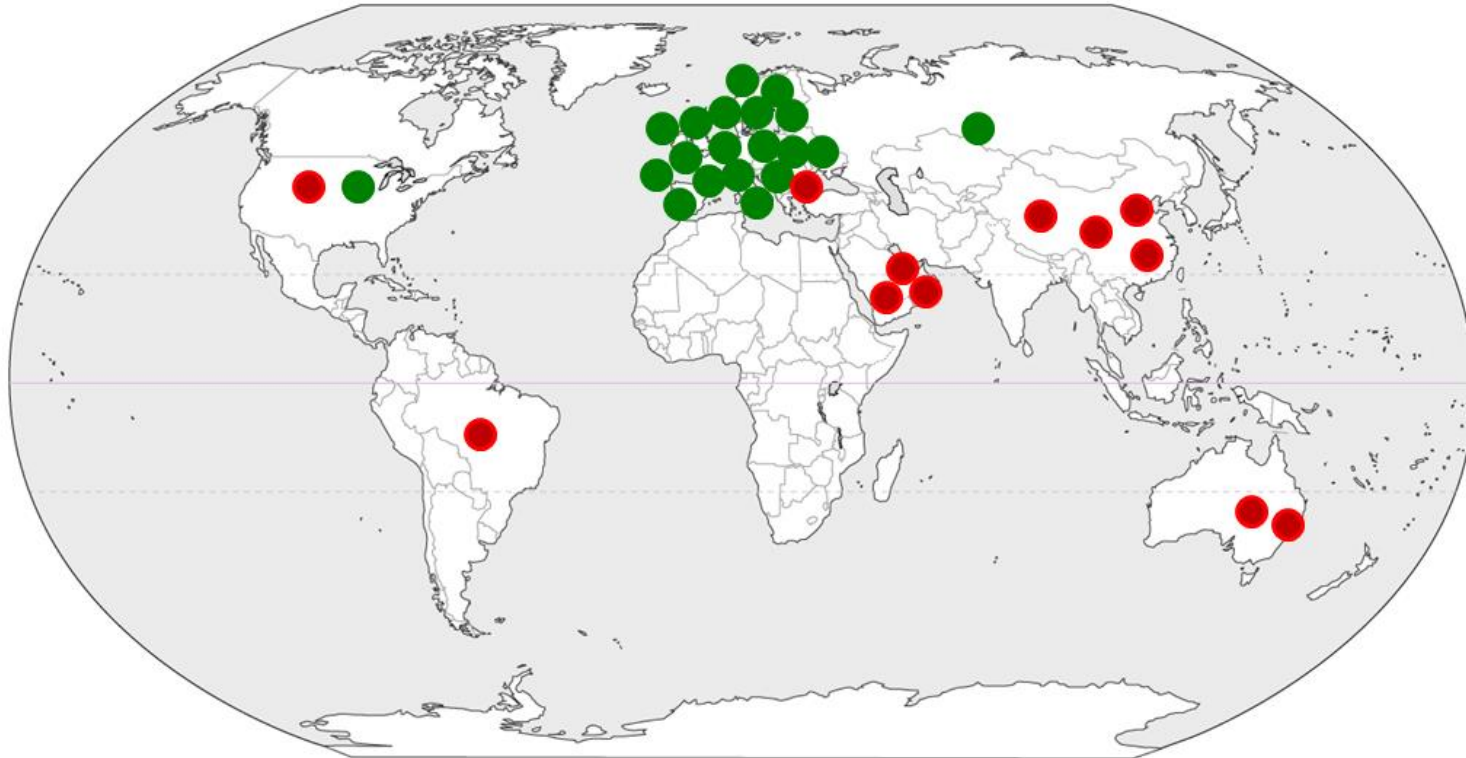
9.) Looking back after having implemented alpha-numeric call-signs in our Airline operations, what were the biggest problems you faced?



The survey received responses from 32 worldwide operating Airlines.

● Airlines that make use of alpha-numeric call-signs (homebase)  
 ● Airlines that make **NOT** use of alpha-numeric call-signs (homebase)

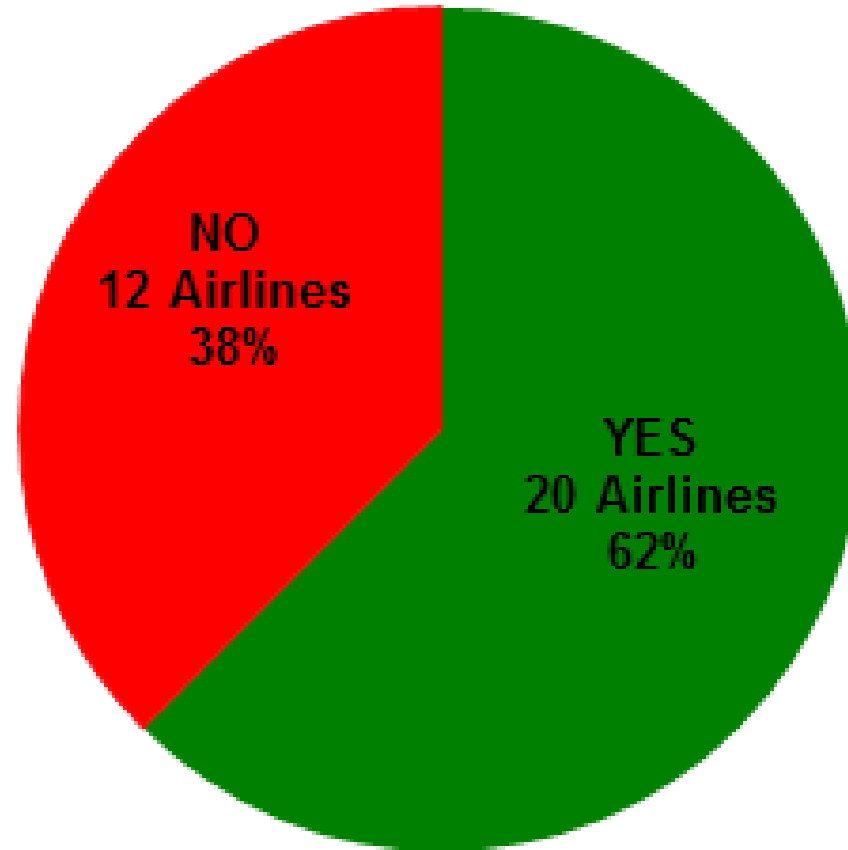
EK Flight Operations Support  
Version 1.1/15.July 2014

# 32 worldwide operating Airlines participated in the EK Survey



-  Airlines that make use of alpha-numeric call-signs (home base)
-  Airlines that make NOT use of alpha-numeric call-signs (home base)

# Number of Airlines using alpha-numeric ATC call-signs



# The ICAO MID Region: Acceptance of alpha-numeric Call-Sign

The following table indicates either the entire region or individual countries, where Airlines specifically pointed out to not use alpha-numeric call-signs (- number of voting in brackets).

<b>MID</b>
<b>Region (5)</b>
<b>Afghanistan (1)</b>
<b>Egypt (3)</b>
<b>Iraq (1)</b>
<b>U.A.E. (1)</b>

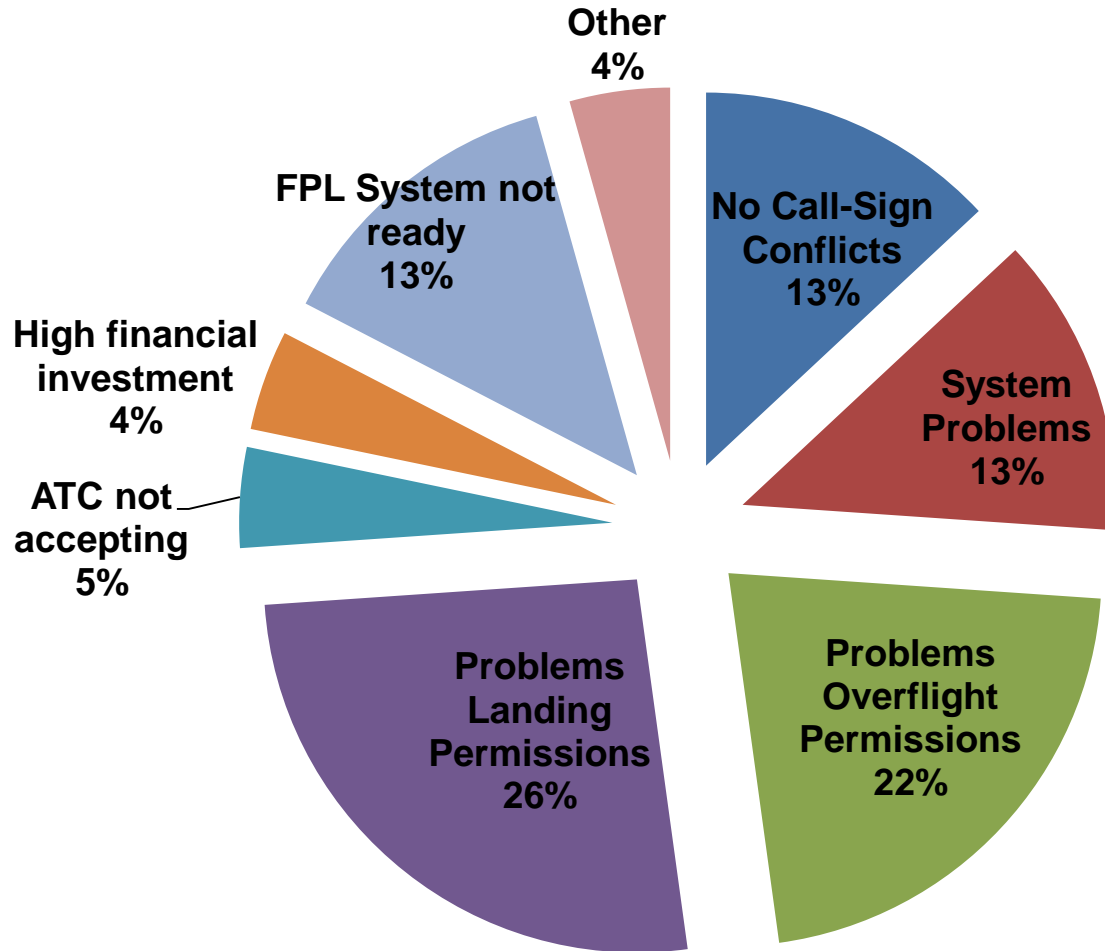
- 5 Airlines pointed out, that they do not/cannot use alpha-numeric call-signs in the ICAO MID Region.
- Specifically, the following countries were listed to be of a ‘challenge’:
  - Afghanistan
  - Egypt
  - Iraq
  - U.A.E.

Landing/Overflight Permissions:  
Have you experienced problems requesting/accepting overflight permissions when making use of ‘alpha-numeric’ ATC call-signs?

<b>MID</b>
<b>Region (1)</b>
<b>L - Kuwait (2)</b>
<b>UO - U.A.E. (1)</b>
<b>O - Lebanon (1)</b>
<b>O - Qatar (1)</b>
<b>O - Saudi Arabia (2)</b>
<b>O - Libya (1)</b>
<b>O - Iraq (1)</b>
<b>O - Syria (1)</b>
<b>O - Yemen (1)</b>

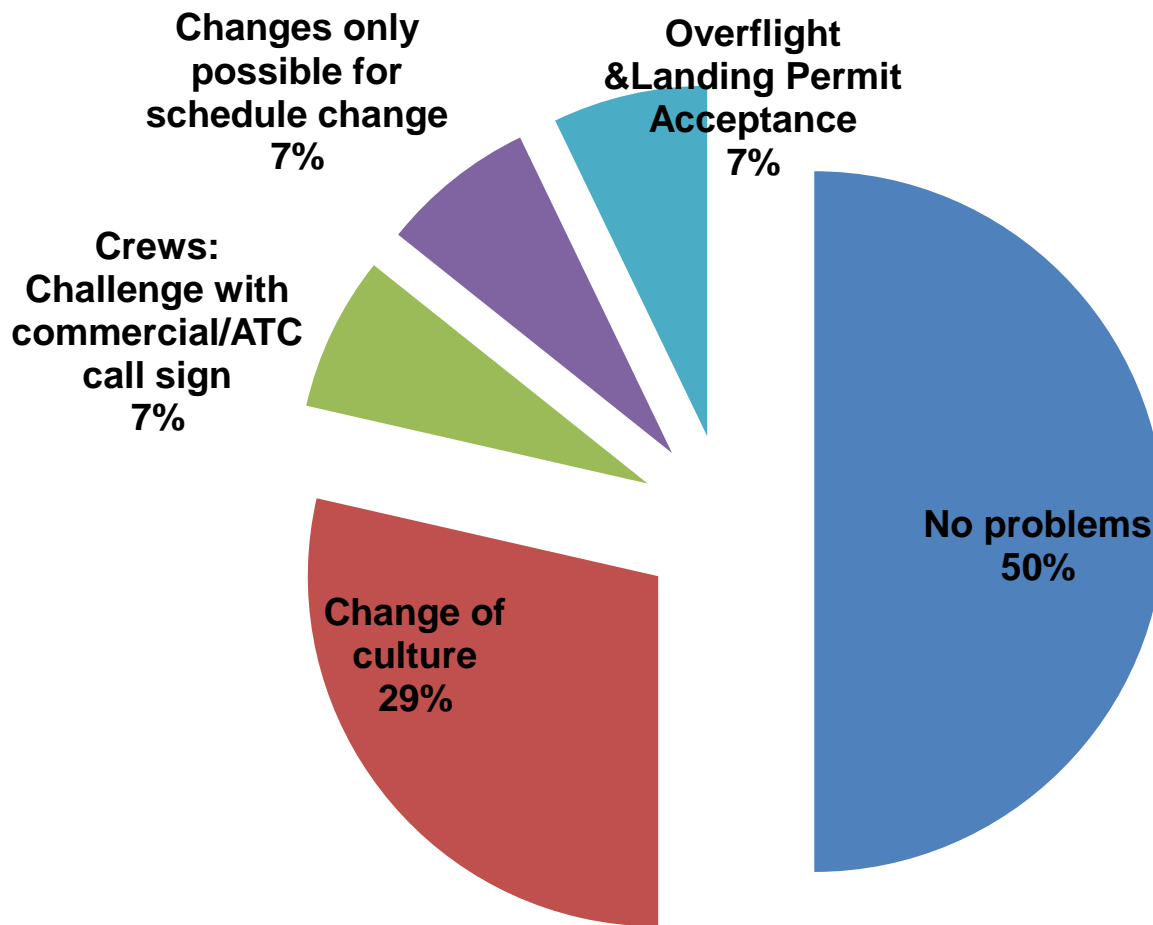


# Why Airlines do not use alpha-numeric ATC call-signs:



# Post-Implementation Analysis

## What were the biggest problems you faced?



# Supporters & Stakeholders



**U.A.E. GCAA**



**IATA**

(Regional Offices and Headquarter)



**CANSO**

– Middle East Office



**ICAO**

- Regional Offices



**Dubai Air Navigation Services**  
- Trial Dubai TMA

# U.A.E. GCAA has issued an AIC dealing with “Call Sign Similarity”

AIP United Arab Emirates

AIC A 01/2015-1



**Contact**

Post: Aeronautical Information Services  
General Civil Aviation Authority  
P.O. Box 666  
Abu Dhabi  
United Arab Emirates

Tel: +971 2 599 6866  
Fax: +971 2 599 6889  
Email: [aim@gcaa.ae](mailto:aim@gcaa.ae)  
URL: [www.gcaa.gov.ae](http://www.gcaa.gov.ae)

**Aeronautical Information Circular - United Arab Emirates**

AIC  
A 01/2015  
UFN  
Published on 05 FEB 2015



الهيئة العامة للطيران المدني  
GENERAL CIVIL AVIATION AUTHORITY

## CALL SIGN SIMILARITY

### 1 INTRODUCTION

1.1 The presence of similar call signs by aircraft operating in the same area, at the same time, and on the same frequency may at times give rise to potential and actual confusion and misunderstanding between pilots and ATCOs, resulting in errors that may lead to safety related incidents. This hazard is usually referred to as “Call Sign Similarity”.

1.2 Call sign similarity is one of the major causes for aircraft taking a clearance not issued for them or ATC issuing a clearance to an aircraft it was not intended to.

1.3 Airlines mainly use their IATA commercial flight numbers as call sign. However, because they tend to be allocated in batches of sequential and very similar numbers, Call Sign Similarity can occur.

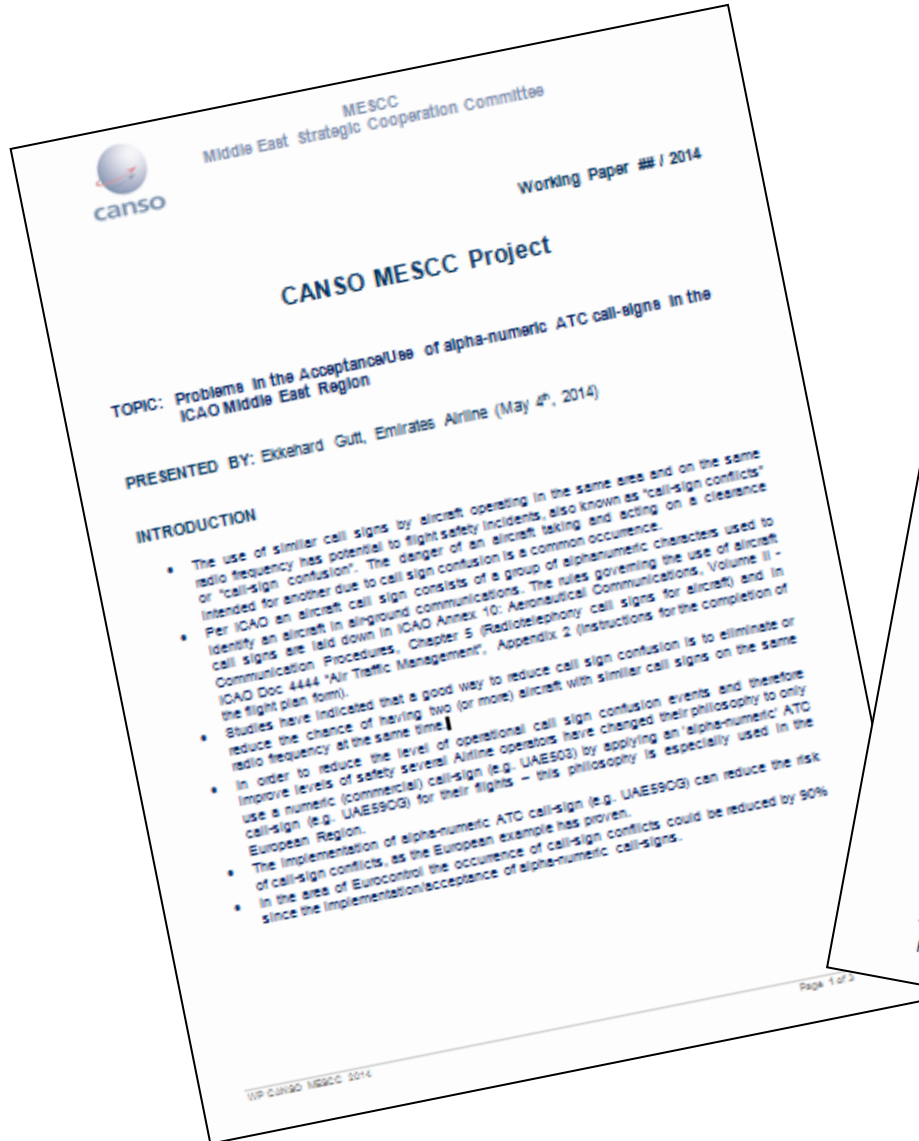
1.4 Several airlines have switched to alphanumeric call signs reasonably successfully in recent years.

### 2 PURPOSE

2.1 The purpose of this AIC is to recommend the best courses of action in order to minimize the risk of Call sign confusion, and to mandate procedures for reporting and managing occurrences when call sign similarity leads to actual call sign confusion.

© General Civil Aviation Authority

# EK: Working Papers raised at CANSO & all IATA Regional Offices



# U.A.E.: MIDANPIRG ATM Sub-Group 2014

## Working Paper: Call-Sign Confusion across the UAE FIR



ATM SG1-WP/29  
05/06/2014



International Civil Aviation Organization

MIDANPIRG ATM Sub-Group

First Meeting (ATM SG/1)  
(Cairo, Egypt, 9-12 June 2014)

Agenda Item 5: **Airspace Management Issues**  
**CALLSIGN CONFUSION ACROSS THE UAE FIR**  
(Presented by United Arab Emirates)

### SUMMARY

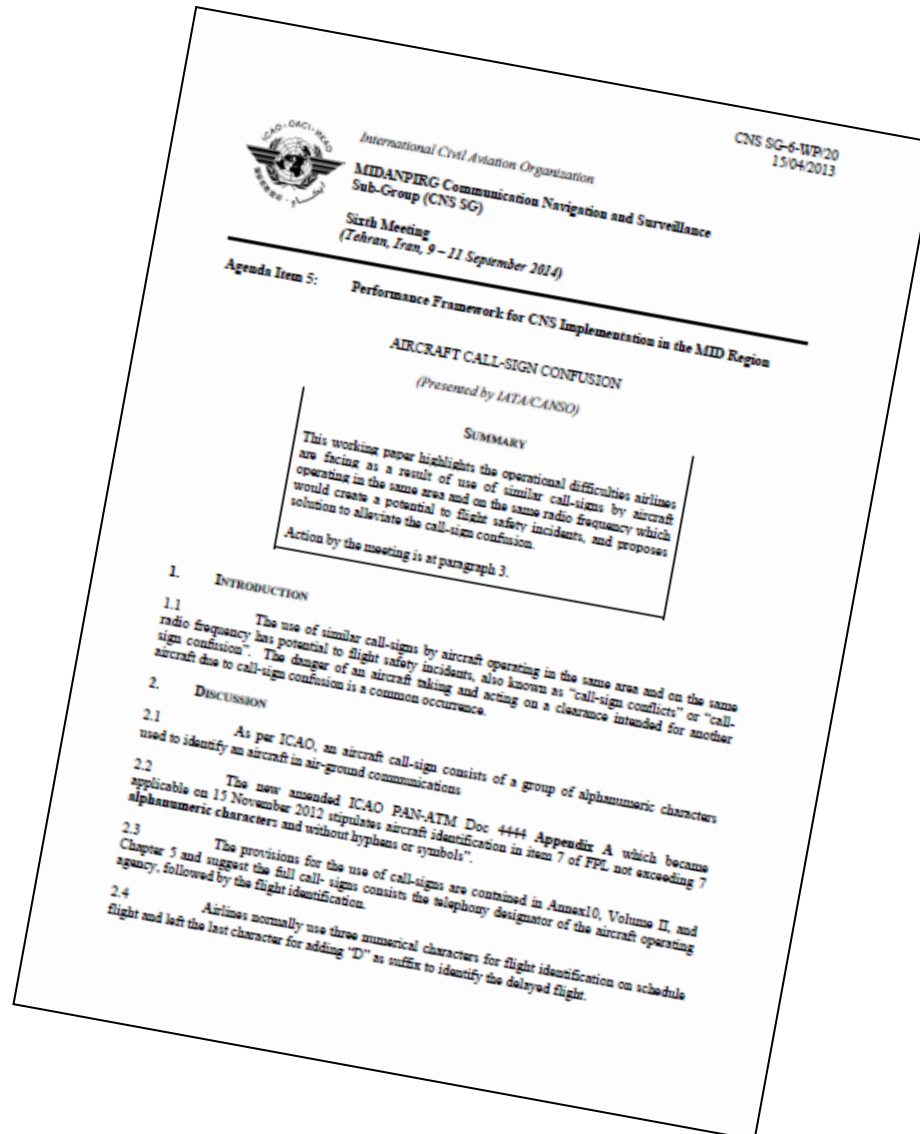
The purpose of this working paper is to put forward the efforts by UAE to reduce the safety risks associated from Callsign Confusion as it is a general safety area which requires development at a regional level.

Action by the meeting is at paragraph 3.

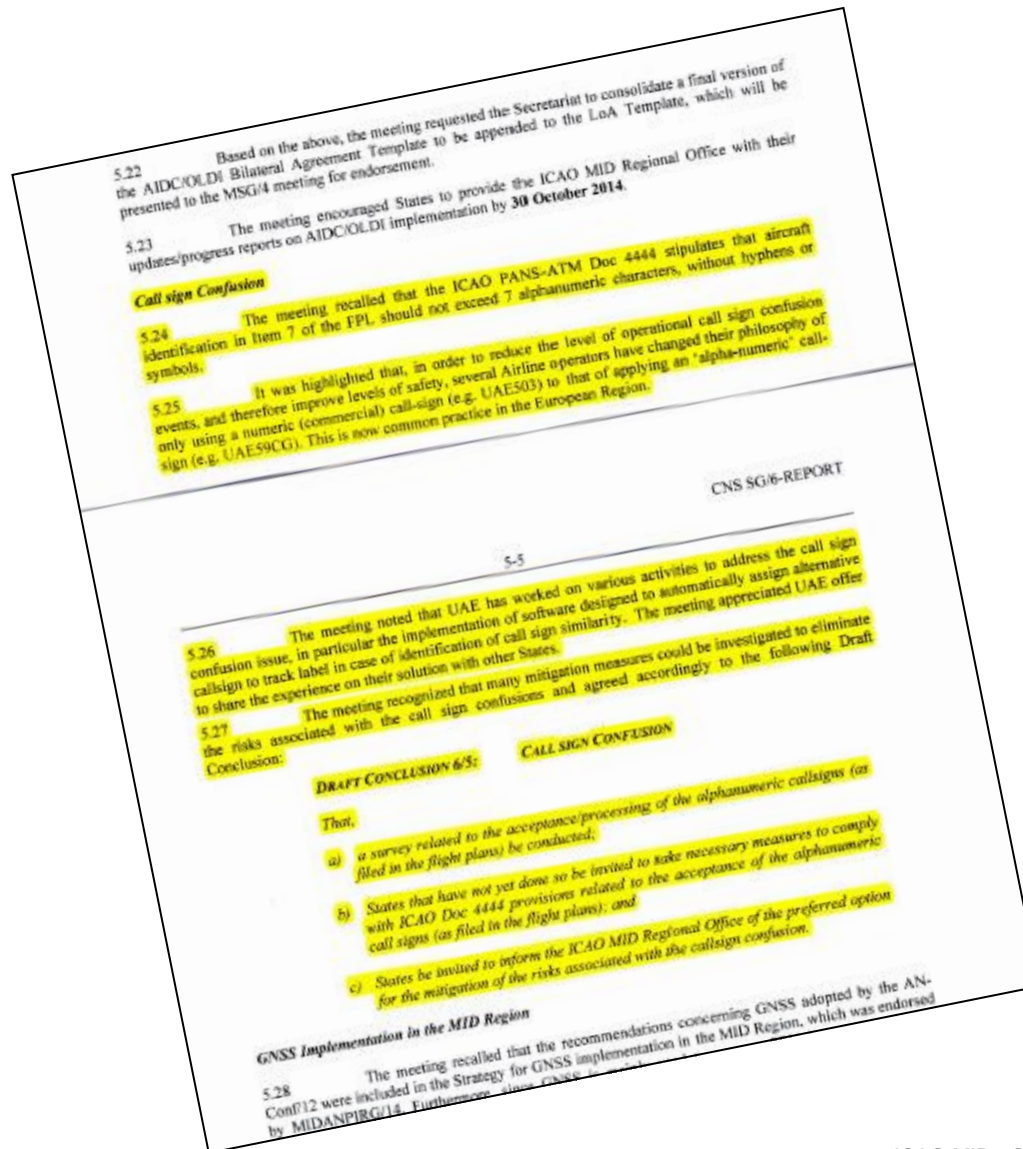
### 1. INTRODUCTION

- 1.1 Callsign confusion is a very significant safety risk within the ATM network and requires addressing by all stakeholders. As traffic levels increase and commonality of routes also increases, airlines and ATS providers need to work collaboratively to ensure that safety significant events are minimized associated to callsign confusion.
  - 1.2 Callsign Confusion is not solely a national issue, but a system wide global problem. Similar callsigns have been adopted over the years for many reasons such as flights to Asia containing the number '8', as this is seen as a lucky number or similar callsigns being used for routings to certain destinations for simplicity within flight planning & scheduling. For the UAE a lot of the commonality emanated from the rise of the UAE carriers such as Emirates and Etihad. The expansion of these airlines contained the adoption of basic flight planning principles used for callsign selection with certain destinations or routes.
  - 1.3 Safety risks associated with callsign confusion - The dangers associated with callsign confusion are not new and have been well documented globally. In 2003 the French ATM services reported 800 safety occurrences concerning similar callsigns ([Eurocontrol Action Plan 2006](#)). Such events lead to wrong and unsafe levels being assigned, wrong headings or routings being acknowledged, double transmissions blocking congested frequencies, extra mental workload for controllers and for pilots alike and losses of separation.
2. Discussion
    - 2.1 The role of minimizing safety implications related to callsign confusion does not just rest with one ANSP or with one airline. System wide collaboration is required from all stakeholders to firstly understand the issues and then work in harmony to formulate the agreed solutions.
    - 2.2 Work has already taken place over the years by various nations creating solutions such as Eurocontrol's Callsign Similarity Tool and the implementation of Alpha Numeric Callsigns.
    - 2.3 The UAE recognizes the safety implications associated with callsign confusion and has worked on various activities to address some of these issues. These activities will focus on

# ICAO MID Region: Safety Group WP




# ICAO MID: CNS SG/6 Report





# ICAO MID Region: State Letter



  
International Civil Aviation Organization    Organisation de l'aviation civile internationale    Organización de Aviación Civil Internacional    Міжнародна організація цивільної авіації    منظمة الطيران المدني الدولي    国际民用航空组织

File Ref.: AN 6/34-14/332 21 December 2014

Subject: **Call Sign Confusion**

Action required: **Reply not later than 31 January 2015**

Sir,

I have the honour to refer to the outcome of the Fourth meeting of the MIDANPIRG Steering Group (MSG-4) held in Cairo, Egypt, 24-26 November 2014, in particular to the following MSG Conclusion:


MSG CONCLUSION 4/22: *CALL SIGN CONFUSION*

That,

- a) a survey based on the questionnaire at Appendix 5A (attached) related to the acceptance/processing of flight plans containing "alphanumeric" call signs ending with letter(s) be conducted;
- b) States that have not yet done so be invited to take necessary measures to comply with ICAO Annex 10 and Doc 4444 provisions related to the acceptance of the alphanumeric call signs; and
- c) States be invited to inform the ICAO MID Regional Office of the preferred option for the mitigation of the risks associated with the call sign confusion before 31 January 2015.

Therefore, you are kindly requested to take necessary measures to ensure the implementation of the above MSG-4 Conclusion, complete the attached questionnaire and provide it to the ICAO MID Regional Office indicating your preferred option for the mitigation of the risks associated with the call sign confusion and similarities before 31 January 2015.

Accept, Sir, the assurances of my highest consideration.

  
for/ **Mohamed R. M. Khonji**  
ICAO Regional Director, Cairo

**Attachment**

Mirasty of Civil Aviation Complex  
Cairo Airport Road  
P. O. Box 45,  
Airport Post Office  
Cairo 11778 A.R.E

Tel: +2 (02) 2674843/1/5/6  
Fax: +2 (02) 2674843

E-mail: [ksk@icao.int](mailto:ksk@icao.int)  
<http://www.icao.int/mid>

# The Challenges

- Air Navigation Service Providers/ANSPs (ATC)
- Airports
- Overflight Permission Authorities
- Landing/Departure Slot Units
- Airline Systems
- **“Mind Setting”**



Departures 13:52

FLIGHT	DESTINATION	BOARDING TIME	GATE	STATUS
NZ119	SYDNEY	12:20	07	DEPARTED
FJ410	NADI	13:10	01	GATE CLOSED
QF198	SYDNEY	13:10	04	GATE CLOSED
NZ175	PERTH	13:25	10	FINAL CALL
MH130	KUALA LUMPUR	13:30	03	FINAL CALL
CX108	HONG KONG	13:40	08	BOARDING
QF126	BRISBANE	13:50	07	BOARDING IN 5 MINS
NZ725	MELBOURNE	14:50		BOARDING IN 60 MIN
NZ733	BRISBANE	14:50		BOARDING IN 60 MIN
THA1	BANGKOK	14:50		BOARDING IN 60 MIN
NZ105	SYDNEY	16:05		PLEASE WAIT
QF134	MELBOURNE	15:45		PLEASE WAIT
EK419	SYDNEY	16:50		
NZ707	SYDNEY	16:50		
NZ14	LOS ANGELES	16:55		
EK433	BRISBANE	17:20		
QF44	SYDNEY	17:50		

Please do not leave baggage unattended.

# EK – The ‘Project Plan’



## Simulate

- FPL Trials, System Checks, Flight Trials



## Plan

- Surveys, Questionnaires, Overflight Permission Requests, Airport Slots



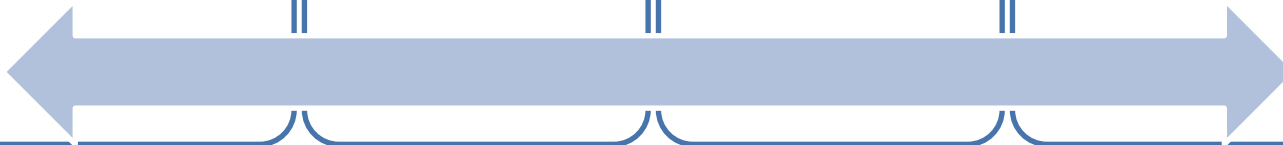
## Operations

- Use of alpha-numeric call signs on a step-by-step basis for environments, where acceptance is fully confirmed.



## Post Review

- Review operational results and problems and challenges. Statistics. Gradually increase the usage



# Outlook



# Our Vision for the future...



“Our vision for our future global ATM system is one where a pilot can fly into **Dubai**, **Djakarta**, **Brussels**, **Lagos** without any differences in equipment, procedures, or the quality of air traffic services.”

FAA Administrator Marion Blakey





## Use of alpha-numeric ATC Call-Signs: We have a challenging plan for **2K15** !



Hello Tomorrow



**Thank you very much for your attention.**

Emirates Group Headquarter  
P.O. Box 92  
Dubai/U.A.E.  
Phone: +971 4 708 4304

Ekkehard Gutt  
Emirates  
Flight Operations Support  
Planning & ATM  
[ekkehard.gutt@emirates.com](mailto:ekkehard.gutt@emirates.com)