

Regional Focus



ANSP performance benchmarking workshop

Asia Pacific

Thursday 12 November 2020

15:00 – 17:00 SGT | 08:00 – 10:00 CET

Speaker



Mr. Hai Eng
Director APAC Affairs

CANSO

Moderator



Ms. Ellen van Ree
Strategy and Integration
Assistant Programme Manager

CANSO

Strategy and Integration

The Strategy and Integration Programme deals with the strategic, institutional and regulatory aspects of air navigation services. It provides information and analysis on issues related to the future of the ATM industry and of CANSO.

The Strategy and Integration Standing Committee (SISC) works in close coordination with both the Safety Standing Committee (SSC) and the Operations Standing Committee (OSC).



Michelle Bishop
Director, Programmes



Ellen van Ree
Strategy and Integration Assistant Programme Manager

Speaker



**Ms. Diána Rohácsné
Galgóczi**

**Chair CANSO GBWG and
Head of International Financial
Affairs Unit, HungaroControl**

Agenda

- Introduction to Global Benchmarking Workgroup (GBWG) and activities
- Key findings latest data trends (2014-2018)
- Benefits of participating and how
- Case studies from current GBWG members
- Q&A
- Closing remarks

Introduction to Global Benchmarking Workgroup (GBWG) and activities

Poll #1

Awareness of the GBWG

To what extent are you aware of the work of the GBWG?



Global Benchmarking Workgroup (GBWG)

Collaborates in the development of key performance measures, monitors performance in air navigation services provision and identifies industry best practices to support the transformation of global ATM performance.

- Only open to ANSPs
- 46 Full Members
- Helios – data support

Key activities/outputs



**Benchmarking
Report**



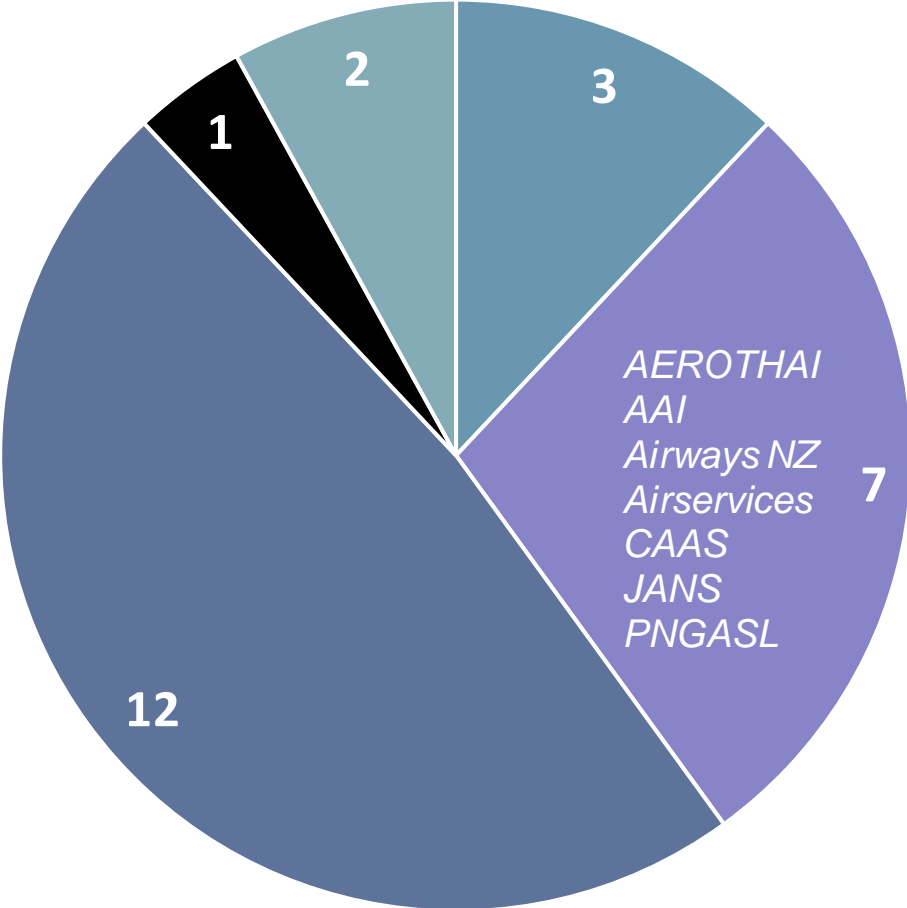
**Biannual
Meetings**



**Data
Dashboard**

CANSO Global ANS Performance Report

- Global Air Navigation Services (ANS) Performance Report (2014-2018) is available on the CANSO website - Publications
- The public report presents key findings on ANSP's cost efficiency and productivity, and KPI results
- Includes supporting analysis & thought pieces based on feedback from ANSPs
- Incorporates input from other CANSO WGs on trends in other areas such as safety, operations and human resources
- NEW: Incorporates data for European ANSPs participating in the ATM Cost-Effectiveness (ACE) report (i.e. collected by EUROCONTROL Performance Review Unit (PRU))



■ Africa
 ■ Asia-Pacific
■ Europe
 ■ Latin America & Caribbean
■ North America

Data submitted direct to CANSO by GBWG members
 2014-18 report released in Sep 2020

Data dashboard

GBWG
participants
only

- An interactive tool (based in Power BI) to investigate KPI trends
- Incorporates both continental and oceanic ANS data
- Provides statistics that help ANSPs determine organization goals
- Released in December following reference year (6-9 months before public report released)



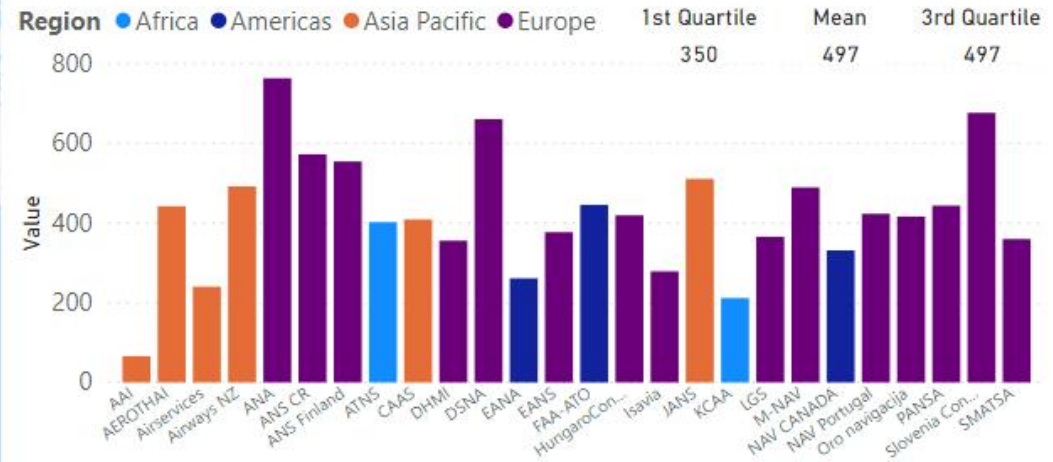
Data dashboard

KPI: 1 C - Cost per Flight Hour
 Inflation: Yes
 ANSP: All
 Region: All
 Year: 2019

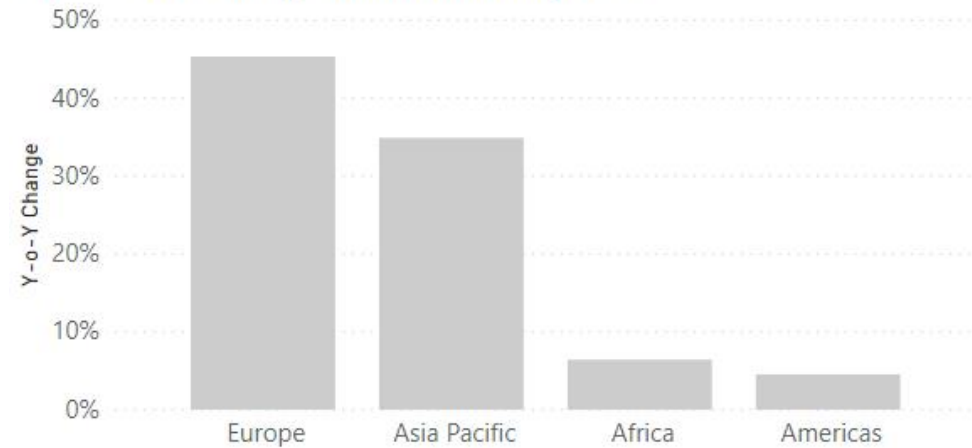
Reporting Countries



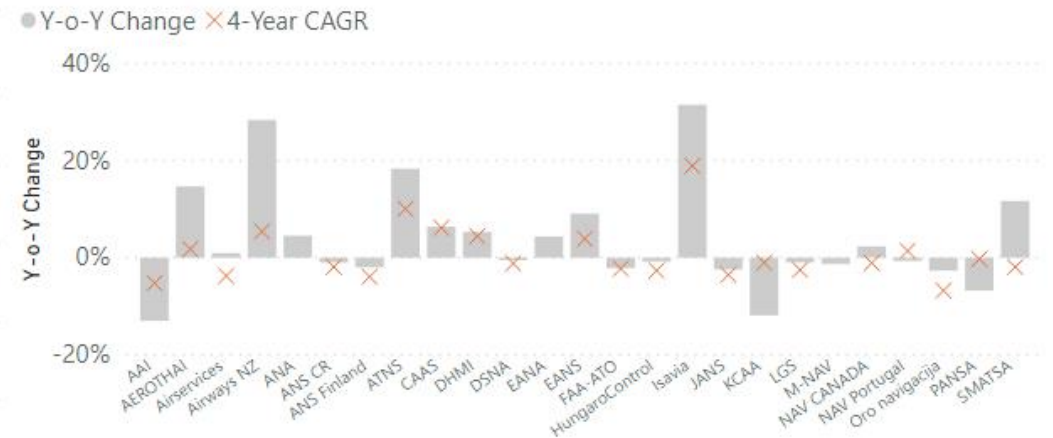
Data for the selected KPI in 2019



% Y-o-Y 2019 Change of selected KPI by ANSP



% Y-o-Y Change and 4-Year CAGR of selected KPI by ANSP in 2019



Data dashboard

KPI

1 C - Cost per Flight Hour

Inflation



ANSP

Region

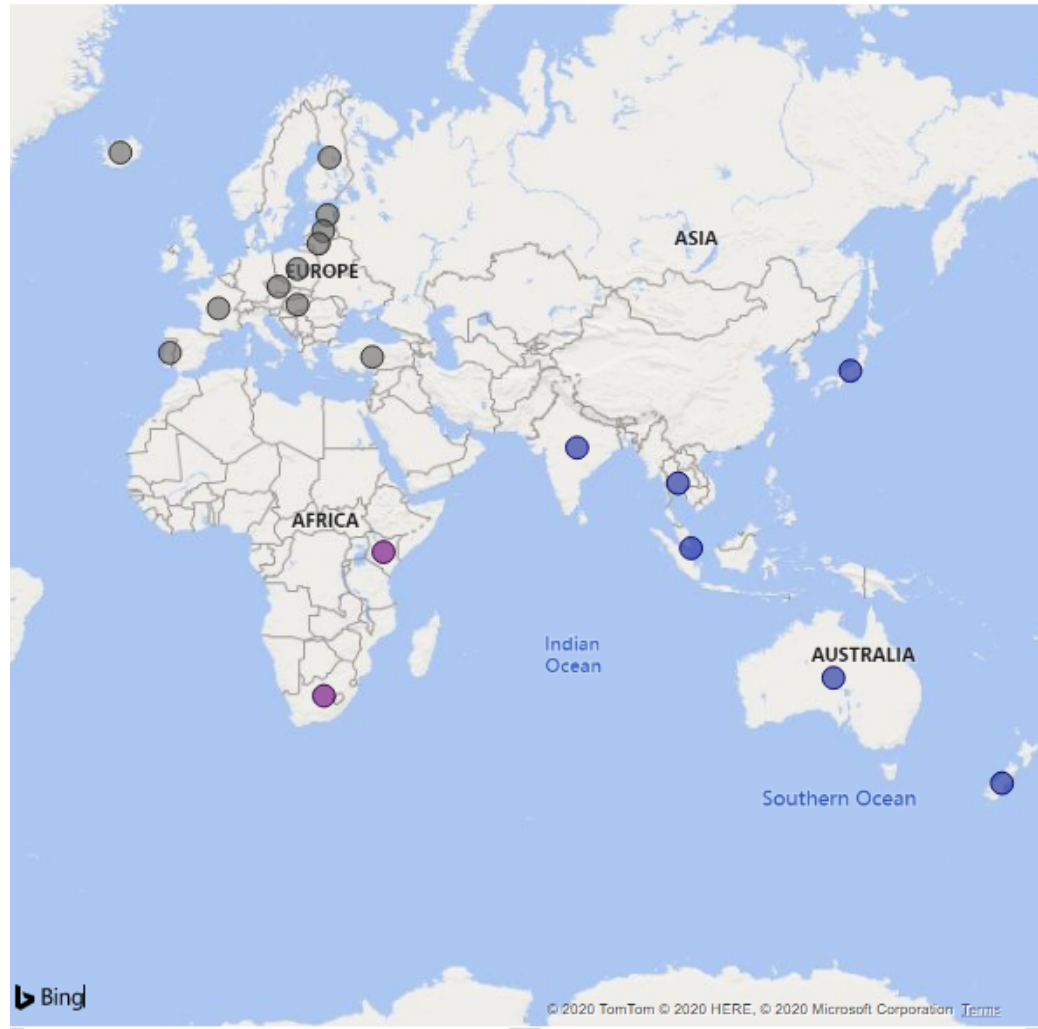
Year

All

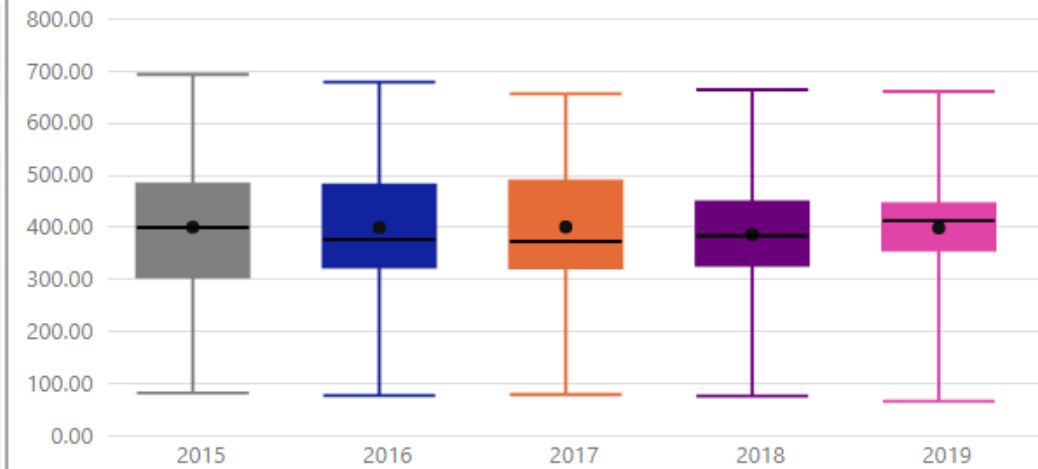
All

2019

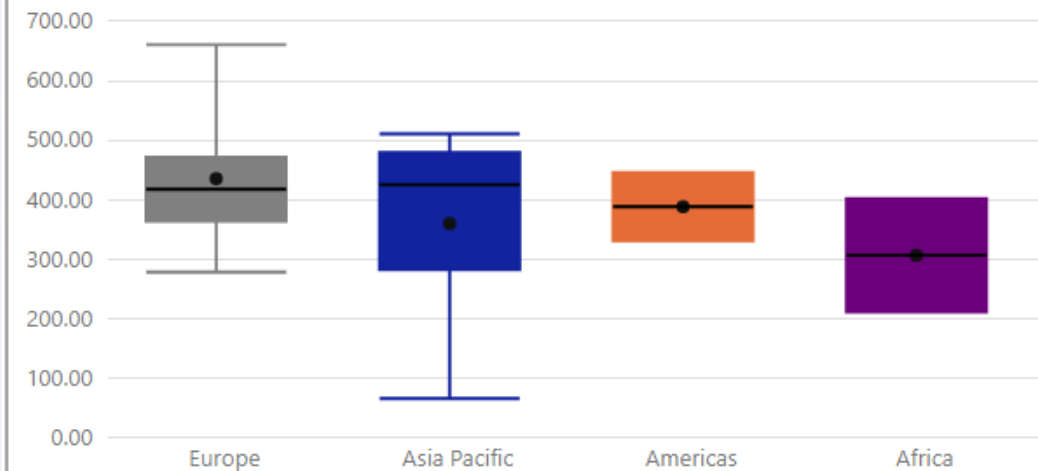
Reporting Countries



5-Year Trend of Selected KPI



Data for the selected KPI by Region in 2019





GBWG meetings

- Monitor & review report drafts and provide feedback on data collection process
- Discuss trends identified in report/dashboard in more depth via interactive sessions
- Explore new benchmarking opportunities by trialing additional KPIs
- Share experience and practices in improving performance

Poll #2

Global ANS Performance Report

How do you currently use the
Global ANS Performance Report,
if at all?

Regional Focus



ANSP performance benchmarking workshop

Asia Pacific

Speaker



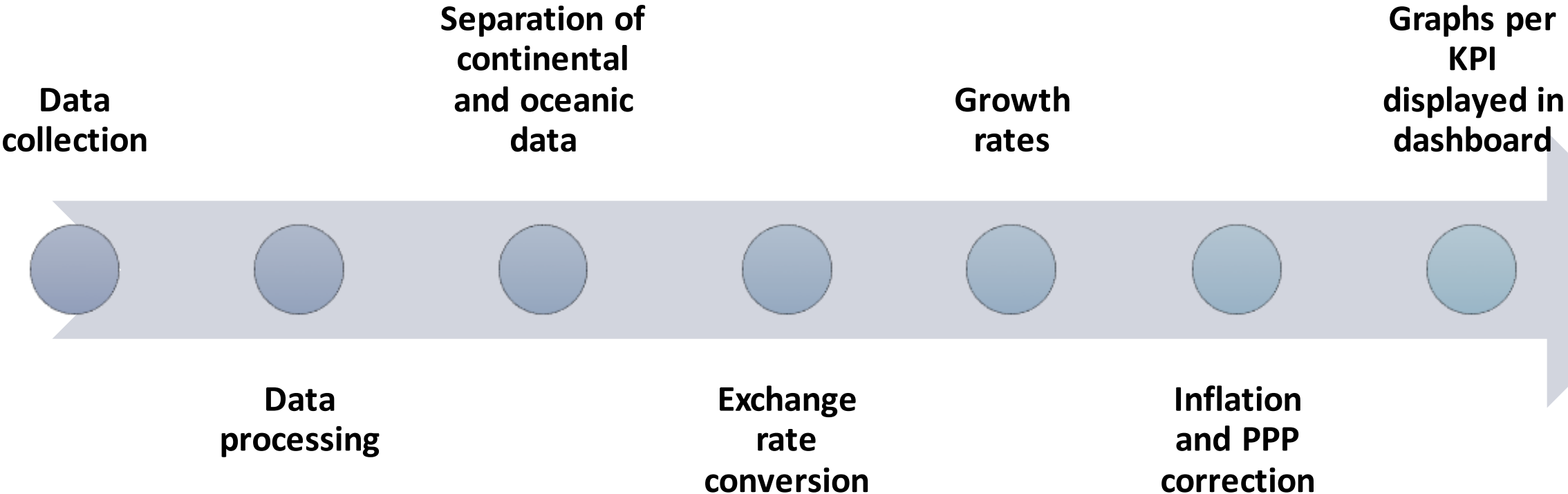
Ms. Fiona Ribbons

Aviation Consultant

Helios (an Egis company)

Key findings latest data trends (2014-2018)

Data processing



2018 Trends



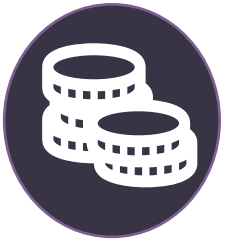
Increases in traffic continue to outweigh increases in costs



Increases in employment costs were consistent with those recorded in 2017



ATCO productivity increases were widespread



Costs excluding 'ATCO in OPS Employment Costs per IFR Flight Hour' reduced for most ANSPs

98%

ANSPs that saw ↑
IFR flight hours
2017-18

59%

ANSPs that saw ↓
continental Total
Cost per IFR flight
hours

76%

ANSPs that saw ↑
continental ATCO
productivity

Poll #3

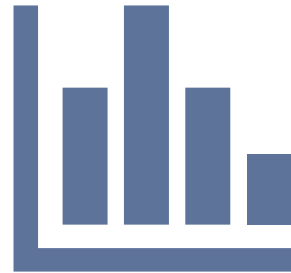
Performance monitoring

Does your ANSP currently monitor or benchmark its performance?

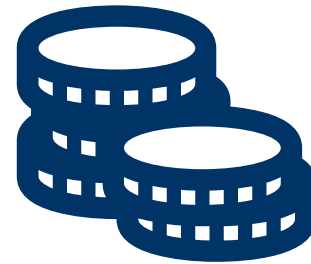
Assess where you fall



Benchmark your performance through statistical values



Assess ANSP trends



PPP adjustment comparisons for total and employment costs per IFR flight hours



Compare “apples to apples”

Understand the deeper context

- Supported with contextual data to understand individual ANSP performance
- Increasing collaboration between CANSO WGs to identify possible drivers of trends in wider context
 - Safety Performance Measurement Workgroup (SPMWG)
 - Human Resources Workgroup (HRWG)
 - Operational Performance Workgroup (OP WG)
- Aiming to incorporate 'themes' into reports in future to further investigate trends, supported by additional data submitted by ANSPs e.g. impact of COVID-19 on 2020 ANS performance

Benefits of participating

**How can you get
involved?**

Poll #4

Support requirements

How confident are you in being able to provide the basic data?

Seven simple measurements

Total costs

IFR flight hours

ATCO hours

ATCO employment cost

Other costs

No. of ATCOs

No. of frontline service support staff

Detailed definitions
will be provided

Data to be provided
for continental &
oceanic

Workbook Demo

Workbook

The screenshot displays the Microsoft Excel interface. The title bar shows 'Trial Blank_WB_2020- v12 - Excel' and the user 'Fiona Ribbons'. The ribbon is set to 'Home', with the 'Font' group selected. The formula bar shows 'G31'. The worksheet grid shows columns A through W and rows 1 through 25. A large blue-bordered box contains a navigation menu with the following text and buttons:

Please complete the basic workbook. The advanced workbook is then optional but will enhance analysis and outputs

- 'Basic' data is used to calculate KPIs within the report
- 'Advanced' data is additional data that is used to trial KPIs and perform additional analysis for presentation

To view or update previous years of data click previously submitted

To view outputs click 'Output Sheets'

For further definition of any metrics please refer to the definitions and the KPI framework.

Basic Workbook	Advanced Workbook
Previously Submitted	Output Sheets
Definitions	KPI Framework

The bottom status bar shows the following tabs: Main Menu, Control, General, Contextual, Input sheet, Basic Previously submitted data, Ba ... (+). The system tray at the bottom right shows 'Display Settings' and a zoom level of 85%.

Workbook

AutoSave Off Trial Blank_WB_2020- v12 - Excel Search Fiona Ribbons FR

File Home Insert Page Layout Formulas Data Review View Help Share Comments

Clipboard Font Alignment Number Styles Cells Editing Ideas

H18

Control - Progress

Main Menu

ANSP Control Sheet

Provide key information about the ANSP. This sheet also contains any additional information that may be required to clarify the input as submitted. Please note that entries on this sheet will NOT automatically be included in the calculation of any Final Data Submission values.

Submission characteristics

ANSP Name

Country

Current data year 2019

Name for graphics

Additional information

Comments

Dates used for obtaining data

Methodology used for calculating

Main Menu Control General Contextual Input sheet Basic Previously submitted data Ba ...

Display Settings 70%

Workbook

The screenshot displays the Microsoft Excel interface. At the top, the title bar shows 'AutoSave Off', 'Trial Blank_WB_2020- v12 - Excel', and the user 'Fiona Ribbons'. The ribbon is set to 'Home', with various toolbars for Clipboard, Font, Alignment, Number, Styles, Cells, and Editing. The active cell is F20.

The main content area features a progress bar titled 'General information - progress' spanning from column A to I. The progress bar shows 0% completion, with a blue bar extending from column A to column B. A 'Main Menu' button is located in cell B3. Below the progress bar, a large yellow box contains the text 'ANSP general information'. Underneath this, a blue text box states: 'This sheet contains general data questions that provide high level information about the ANSP.'

Below the text box, there are several data entry fields:

- Name: [input field]
- Country: [input field]
- Region: [input field]

Further down, there are two sections of text with corresponding yellow highlighted input areas:

- Information supporting report theme**
How are your ATCO in operation overtime hours calculated? [input area]
- What capex projects do you have planned and have these plans been subject to any large changes? [input area]

The bottom of the screen shows the worksheet tab bar with tabs for 'Main Menu', 'Control', 'General', 'Contextual', 'Input sheet', and 'Basic Previously submitted data'. The 'General' tab is currently selected. The status bar at the bottom right shows 'Display Settings' and a zoom level of 80%.

Workbook

AutoSave Off Trial Blank_WB_2020-v12 - Excel

File Home Insert Page Layout Formulas Data Review View Help

Clipboard Font Alignment Number Styles Cells Editing Ideas

B12

Input - progress

Main Menu

■ Continental
■ Oceanic 0% 25% 50% 75% 100%

ANSP Input Sheet

This is the sheet for input of the data that contributes to the KPIs that appear in the report. It also contains definitions for the data fields to aid data submission, please view these by clicking on the definitions button. **Please enter data for the 2019 period**, as specified in the Control sheet.

Data	Continental	Oceanic
Total Costs		
IFR flight hours		
ATCO in operations hours		
ATCO in operations overtime hours		
Employment cost for ATCOs in operations		
Other costs		
Number of ATCOs in operations		
ANS Revenue		
Example price per 1000 km flight for A320		
Example consolidated price per 250 km flight for ATR72		
Number of Frontline Service Support Staff		
Total ATCO in ops hours allocated to en-route		
En-route IFR hours		

Definitions

Information supporting 2020 report theme

	2019
Total Capital Expenditure	

	2015	2016	2017	2018	2019
Continental ATCO in operations overtime (in hours)					0
Oceanic ATCO in operations overtime (in hours)					0

Financial information

	2019
Exchange rate (national currency/USD)	

Main Menu Control General Contextual Input sheet Basic Previously submitted data Basic Output Basic Output (USD) Basic PPP Out ...

Display Settings 100%

Workbook

AutoSave Off Trial Blank_WB_2020- v12 - Excel Search Fiona Ribbons FR

File Home Insert Page Layout Formulas Data Review View Help

Clipboard Font Alignment Number Styles Cells Editing Ideas

C11

A B C D E F G H I J K L M N O P Q

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Main Menu Output sheet Basic PPP Output

Apply Inflation adjustment

Inflation rates

	2015	2016	2017	2018	2019		
	0.00	0.00	0.00	0.00	0.00		

Continental

KPIs	2015	2016	2017	2018	2019	2018-2019 AGR	2015-2019 CAGR
1 Unit cost	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Total Costs	-	-	-	-	-	#DIV/0!	#DIV/0!
IFR flight hours	-	-	-	-	-	#DIV/0!	#DIV/0!
2A ATCO employment costs	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
ATCO employment cost	-	-	-	-	-	#DIV/0!	#DIV/0!
ATCO hours	-	-	-	-	-	#DIV/0!	#DIV/0!
2B ATCO productivity	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
IFR flight hours	-	-	-	-	-	#DIV/0!	#DIV/0!
ATCO hours	-	-	-	-	-	#DIV/0!	#DIV/0!
2C Other costs per IFR flight hour	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Other costs	-	-	-	-	-	#DIV/0!	#DIV/0!
IFR flight hours	-	-	-	-	-	#DIV/0!	#DIV/0!
2D Proportion of total costs made up of ATCO	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
ATCO employment cost	-	-	-	-	-	#DIV/0!	#DIV/0!
Total Costs	-	-	-	-	-	#DIV/0!	#DIV/0!
3A Unit ATCO employment costs	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
ATCO employment cost	-	-	-	-	-	#DIV/0!	#DIV/0!
No. of ATCOs	-	-	-	-	-	#DIV/0!	#DIV/0!
3B Annual Working hours per ATCO in OPS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
ATCO hours	-	-	-	-	-	#DIV/0!	#DIV/0!
No. of ATCOs	-	-	-	-	-	#DIV/0!	#DIV/0!
3C IFR hours per ATCO in OPS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
IFR flight hours	-	-	-	-	-	#DIV/0!	#DIV/0!
No. of ATCOs	-	-	-	-	-	#DIV/0!	#DIV/0!
3D Ratio of frontline service staff to ATCO in OPS	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Frontline staff	-	-	-	-	-	#DIV/0!	#DIV/0!
No. of ATCOs	-	-	-	-	-	#DIV/0!	#DIV/0!

Main Menu Control General Contextual Input sheet Basic Previously submitted data Basic Output Basic Output (USD) Basic PPP Out ...

Display Settings 90%

Why join the CANSO GBWG?



Monitor performance internally, globally and compared to peers



Identify areas of challenges and improvements



Gain access to the data dashboard & underlying data from each KPI



Present results to customers and internal stakeholders through the report or interactive dashboard

Why join the CANSO GBWG?



Share and compare insights with other ANSPs on effective practices



Identify and track key trends affecting the industry and recognise how they are affecting performance



Direct analysis and participate in development of trial KPIs

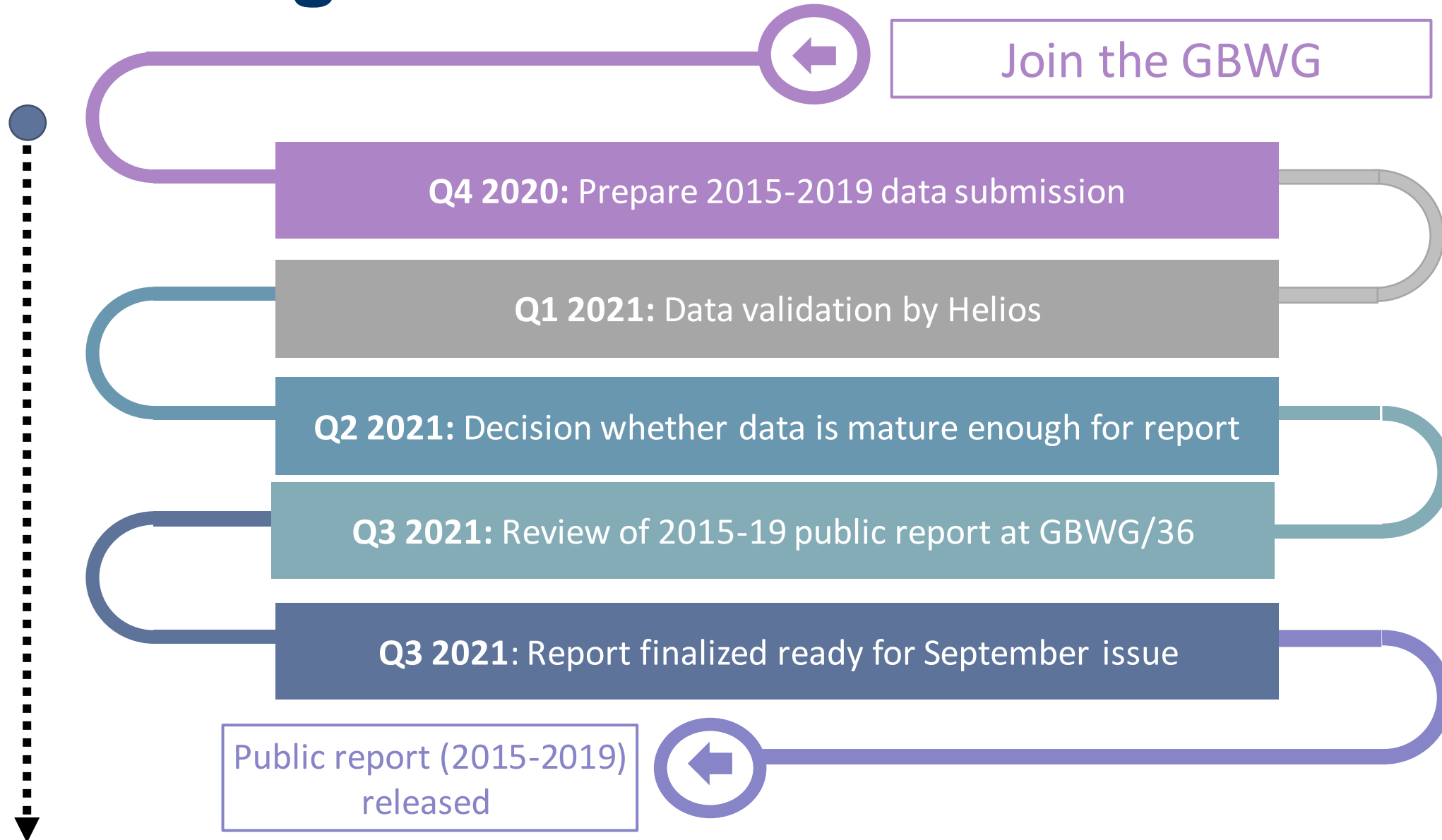


Networking with ANSPs during GBWG meetings

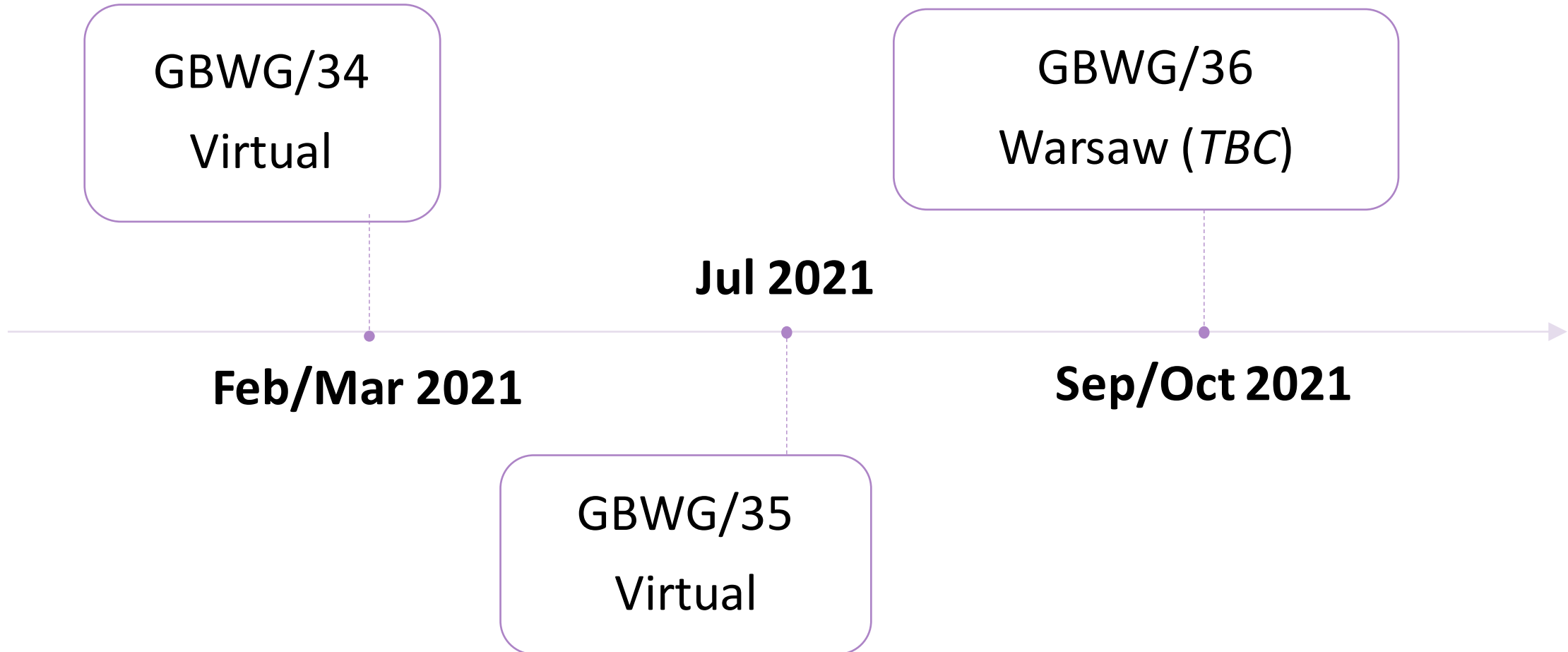
Review of Benefits

Benefits	Participants Reports	GBWG members	EUROCONTROL	EUROCONTROL Members
Ability to opt-in / opt-out	✓	N/A	N/A	X
Ability to choose CANSO or PRU data <i>(European ANSPs only)</i>	✓	N/A	N/A	X
<u>Early</u> access to underlying CANSO (basic) data	✓	✓	X	X
<u>Late</u> access to underlying CANSO (basic) data	✓	✓	✓	X
Access to CANSO advanced data	✓	X	X	X
Access to data dashboard (CANSO data)	✓	✓	X	X
Access to data dashboard (CANSO + PRU data)	✓	✓	X	X

How to get involved



Upcoming meetings



How to get in touch



Data support

Fiona Ribbons

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askhelios.com



GBWG Chair

Diána Galgóczi

diana.galgoczi@
hungarocontrol.hu



CANSO

Ellen van Ree

ellen.van.ree@
canso.org

Regional Focus



ANSP performance benchmarking workshop

Asia Pacific

Speaker



Ms. Neo Shu Li
**Senior Manager (Performance
Management)**

CAAS



CAAS' Performance Benchmarking Experience in GBWG

Neo Shu Li, Senior Manager (Performance Management)
ANSP Performance Benchmarking Workshop
12 November 2020

CAAS' participation in GBWG

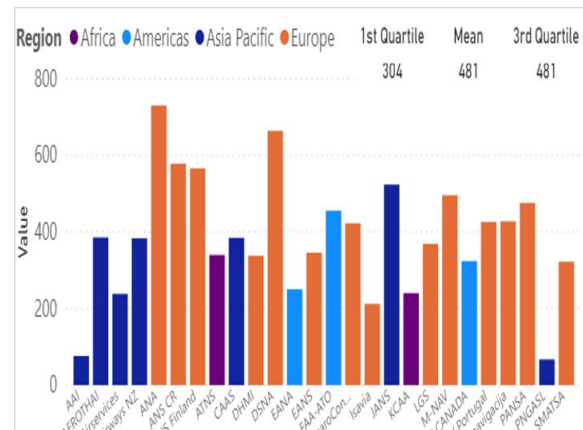
- CAAS participated in various GBWG activities since 2015
- Being in GBWG allows CAAS to compare our cost-effectiveness and productivity performance with other ANSPs and keep us abreast of KPI developments

Global ANS Performance Report

CANSO Global Air Navigation Services Performance Report

2014 – 2018 ANSP Performance Results

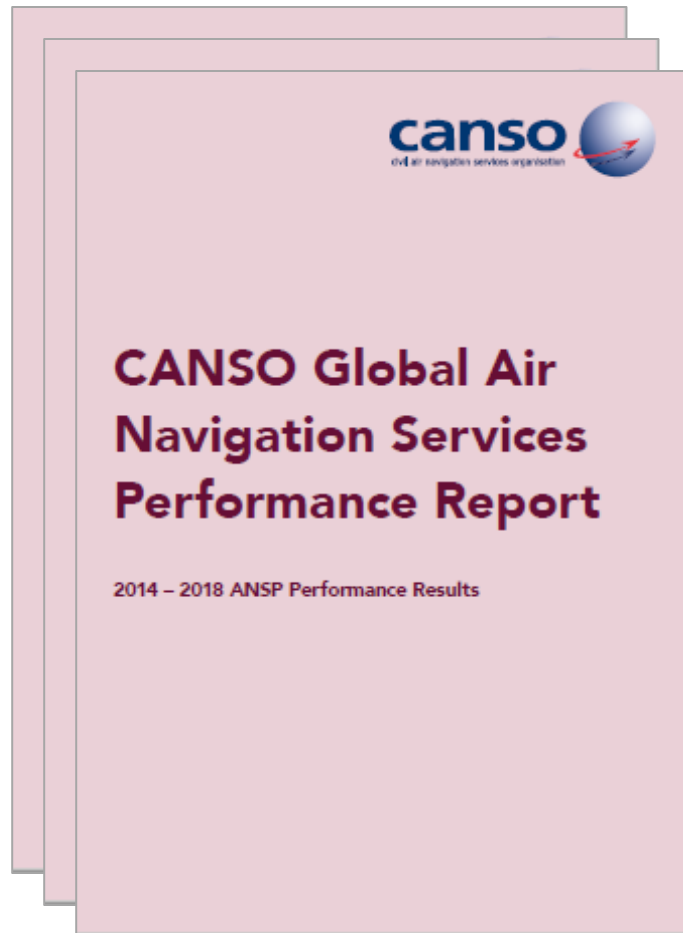
Data Dashboard



GBWG Meetings



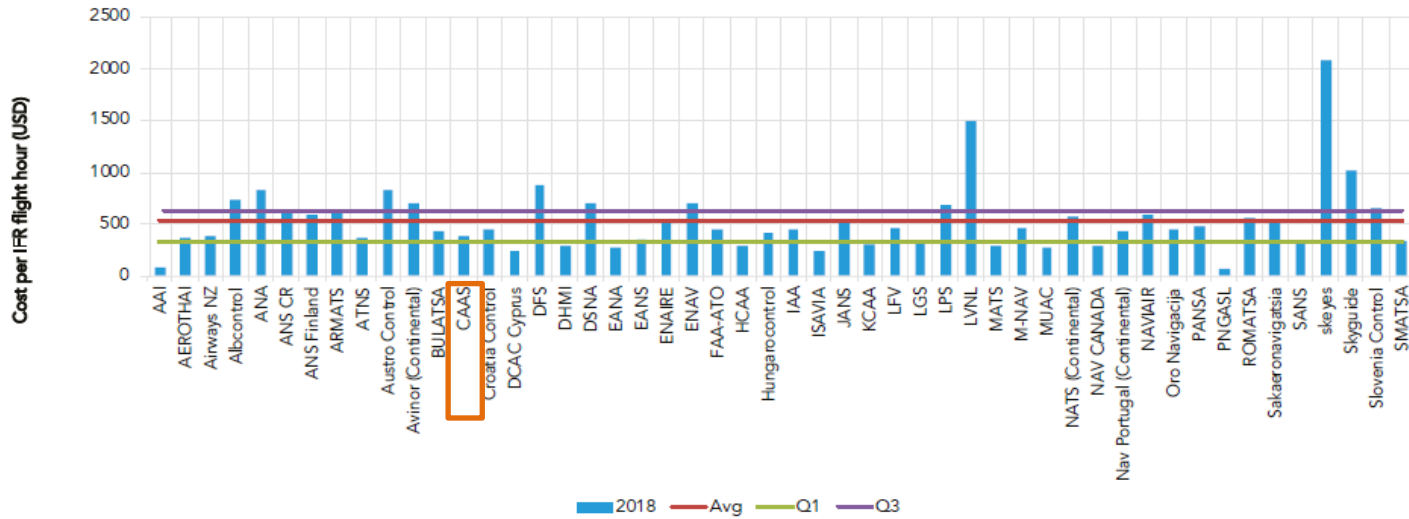
Benefits of participating in GBWG (1 of 3)



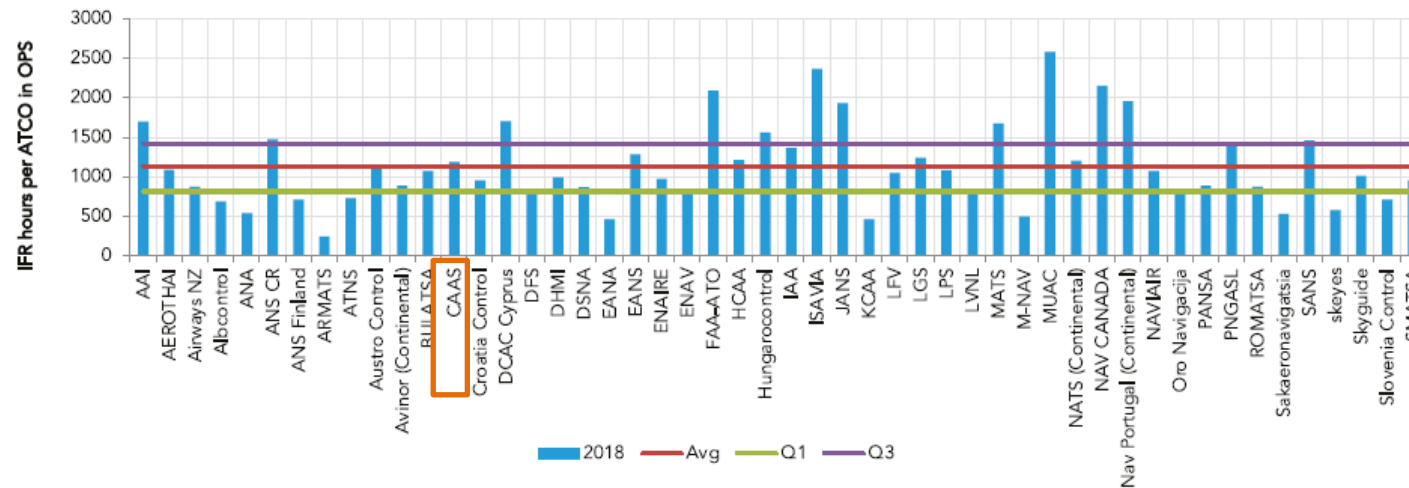
Global ANS Performance Report

- Allow CAAS to measure cost-effectiveness and productivity using a global KPI framework with harmonised data definitions
- Keep us informed on the global ANS performance and gauge CAAS' performance relative to other ANSPs
- Gain insights on factors affecting cost-effectiveness and productivity, and identify ways to improve our performance
- Charts in the report are used in our reporting to senior management

Example of report charts used in CAAS management reporting



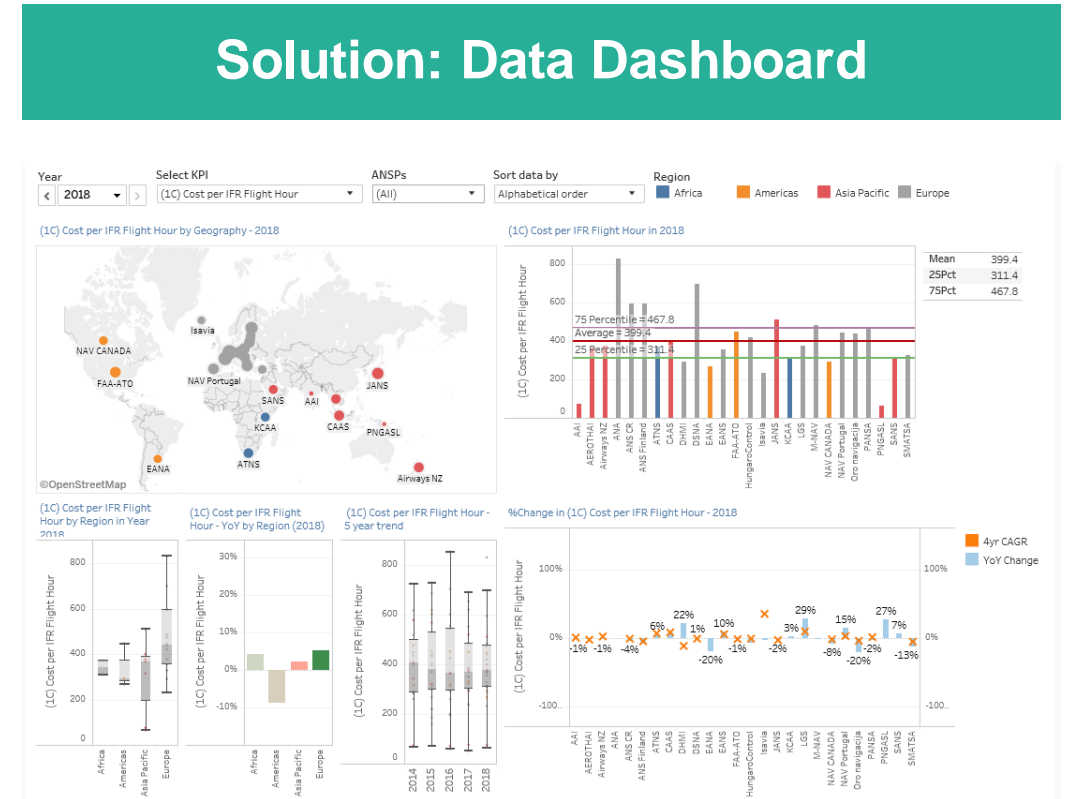
KPI 1: Cost per IFR Flight Hour



KPI 3C: IFR Flight Hour per ATCO in Ops

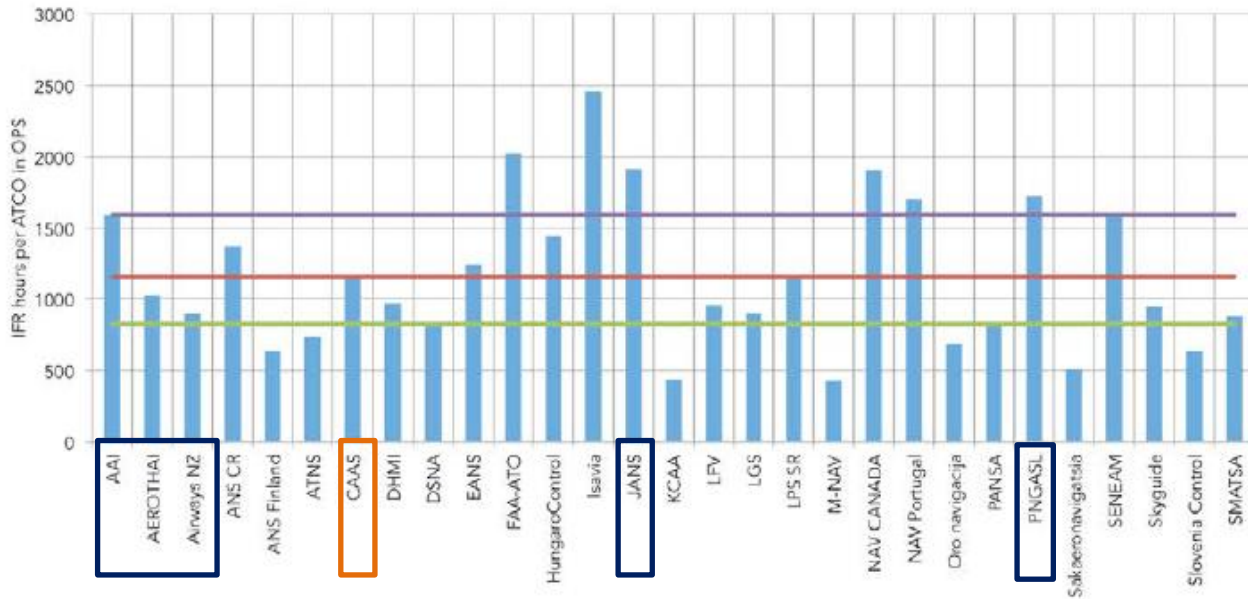
However, there are limitations in using the report charts

- Static charts are difficult to read and understand
- Provide only a snapshot analysis without trend comparison
- Hinder regional analysis as comparisons need to be performed manually
- Difficult to sieve out comparable ANSPs for comparison



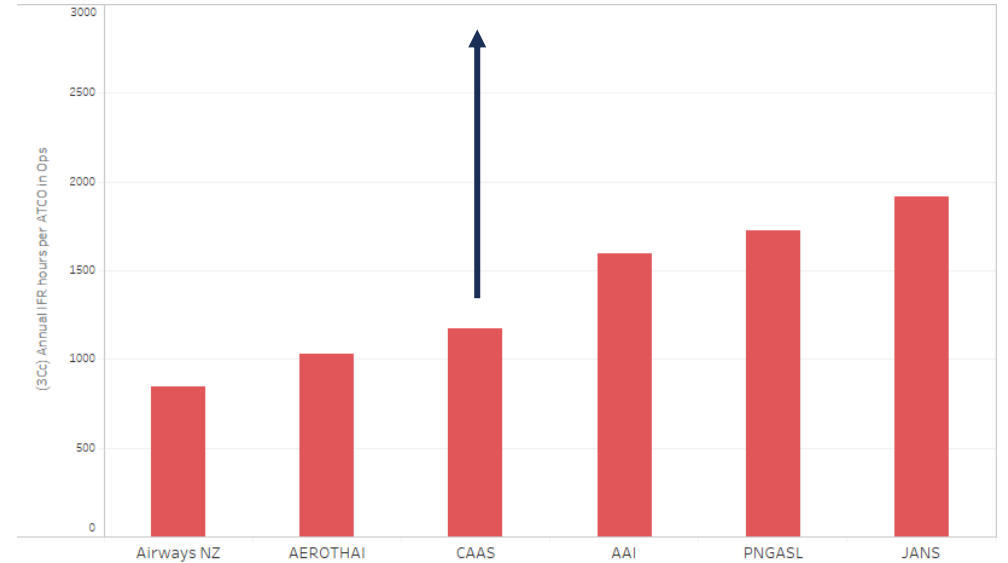
Example of regional analysis enabled by data dashboard

KPI 3C: IFR Flight Hour per ATCO in Ops



Need to manually sieve out ANSPs in the Asia Pacific region for comparison when using static chart

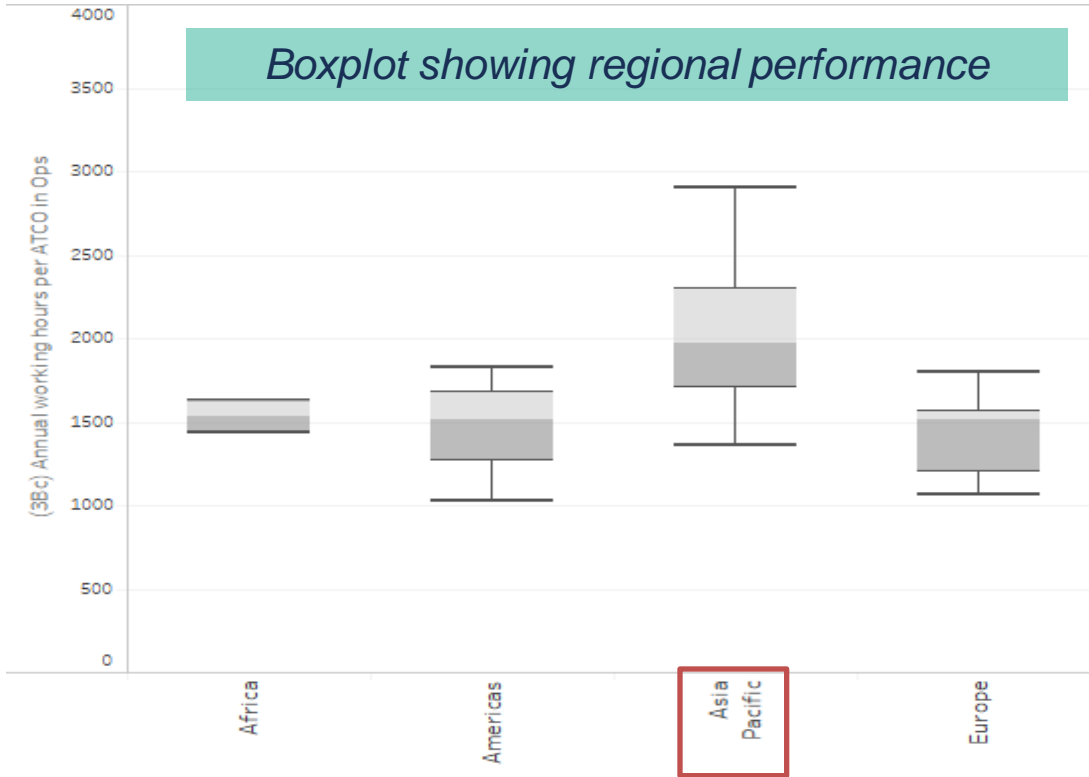
CAAS' ATCO productivity is comparable to participating ANSPs in the Asia Pacific region



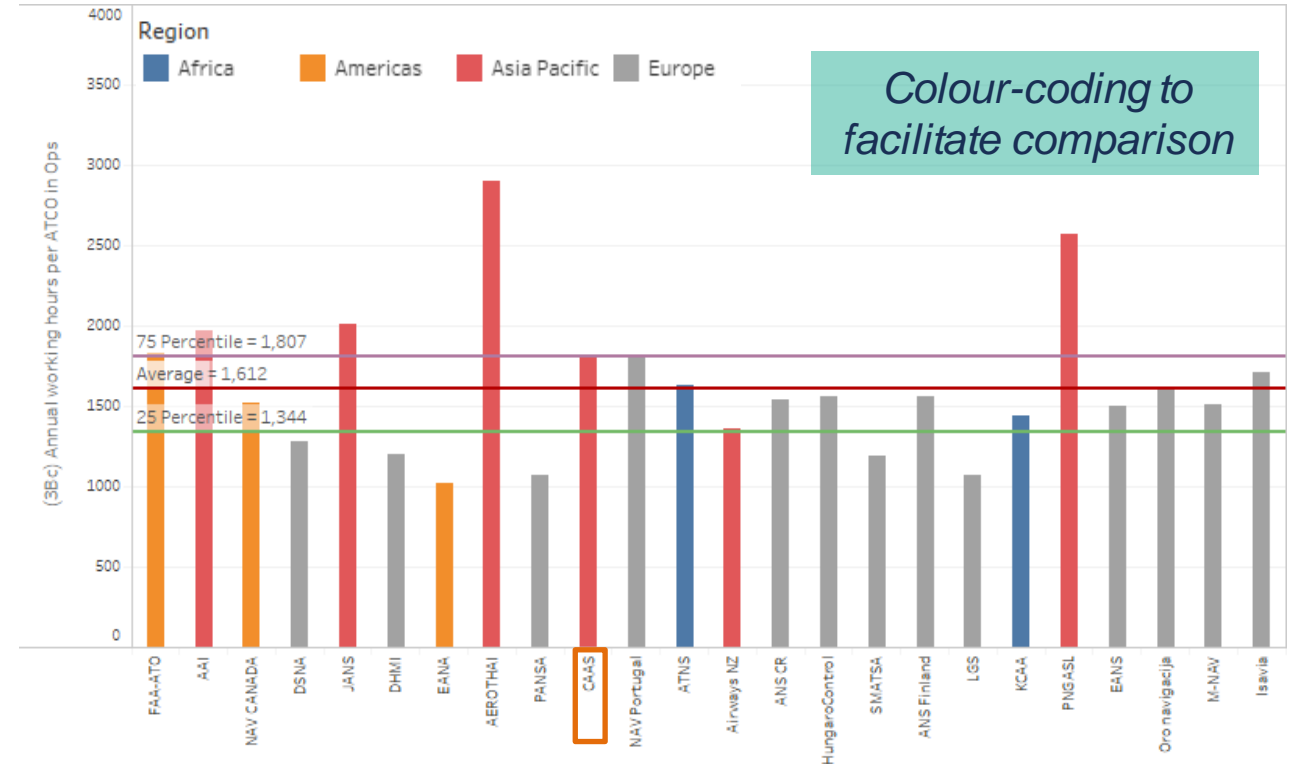
Data dashboard allows us to filter ANSPs in the Asia Pacific Region

Example of regional analysis enabled by data dashboard

KPI 3B: Annual Working Hours per ATCO in Ops



Higher annual working hours per ATCO in Ops in the Asia Pacific region



Globally, CAAS' annual working hours per ATCO in Ops was among the highest but regionally, CAAS was comparable to other ANSPs within the Asia Pacific region

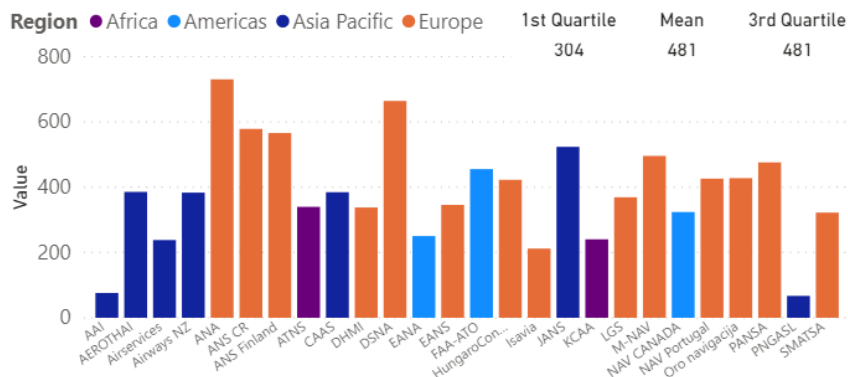
Benefits of participating in GBWG (2 of 3)

Year:
 Select KPI:
 ANSPs:

(1C) Cost per IFR Flight Hour by Geography - 2018



Data for the selected KPI in 2018



Data Dashboard

- CAAS developed the initial GBWG dashboard to facilitate interactive and in-depth analysis of ANSPs' performance
- Serve as a trend monitoring tool to track CAAS performance
- Allow CAAS to customise analysis and compare our performance with similar ANSPs
- Provide CAAS senior management with quick and easy access to information

Benefits of participating in GBWG (3 of 3)



GBWG Meetings

- Networking with other ANSPs to identify best practices and gain insights on solutions in tackling common issues
- Involve in the development of future KPIs
- Promote discussions on latest and future ATM trends and developments
- Cross-working group discussions with other CANSO workgroups, e.g. CANSO HRWG, CANSO OPWG and CANSO SPMWG

Looking ahead..

- CAAS will continue to participate actively in GBWG to gain valuable insights and contribute to the KPI developments
- We look forward to increased GBWG participation especially in the Asia Pacific region as the wealth of data could support more in-depth regional analysis



Thank You

Regional Focus



ANSP performance benchmarking workshop

Asia Pacific

Speaker



Ms. Lívia Cseh

Financial Controller

HungaroControl

HungaroControl – Participation in the CANSO GBWG

ANSP Performance Benchmarking Workshop
12 November 2020

HungaroControl's participation in GBWG



- HC has participated in GBWG since its founding
- Active participation in the preparation of the Global ANS Performance Report and at the GBWG meetings as well
- HC had the chance to welcome the team in Budapest in September 2018



CANSO GBWG MEETING BUDAPEST, 24-26
SEPTEMBER, 2018

The Global ANS Performance Report

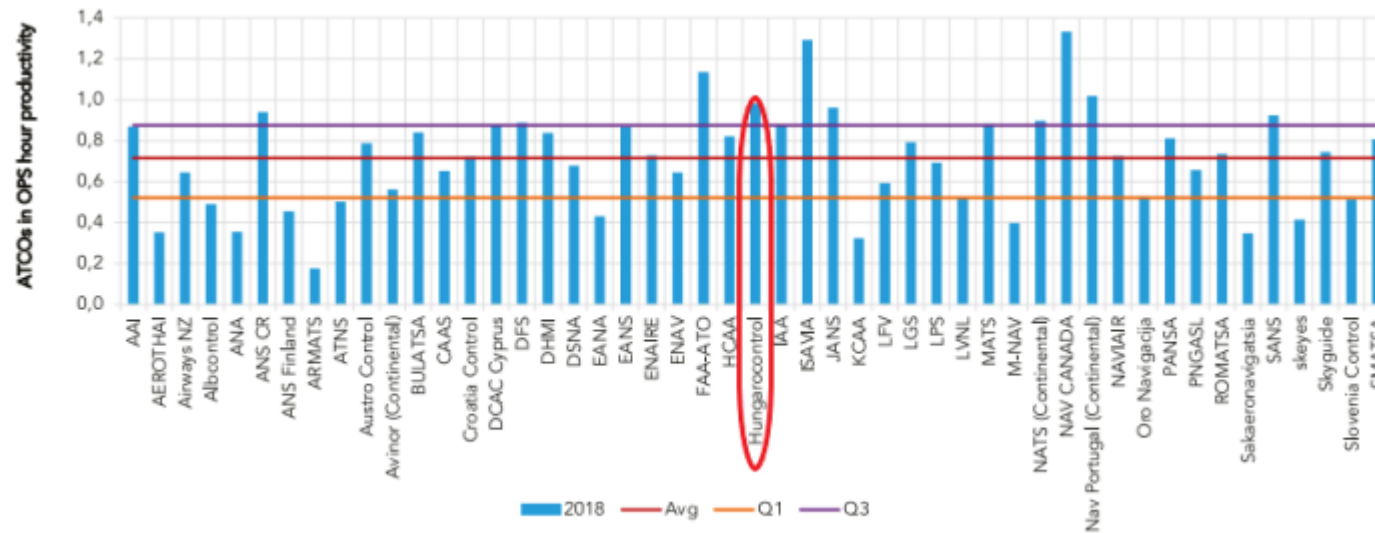
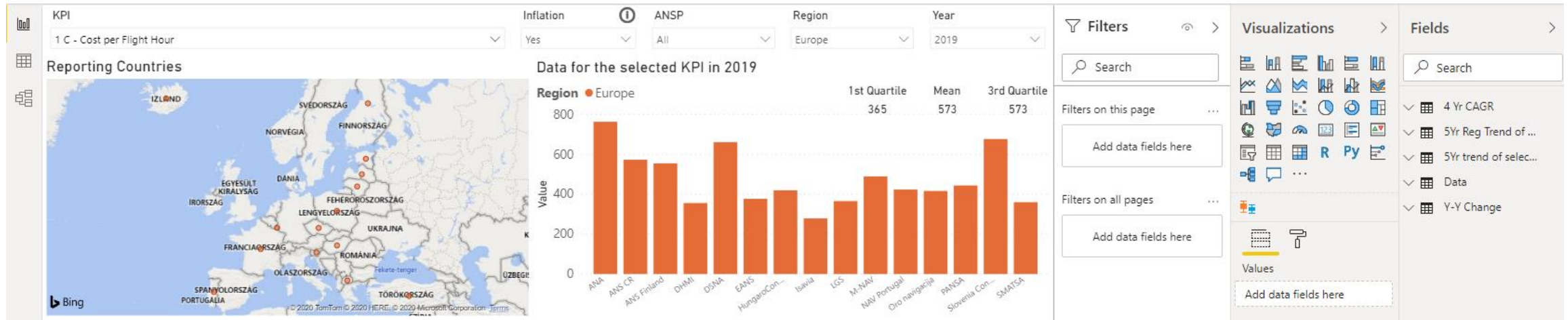


Figure 8 – ATCOs in OPS hour productivity

- HC participates in ACE Benchmarking (this a benchmarking activity that is a regulatory obligation for EU countries).
- As of 2020 ACE data is incorporated in the Global ANS Performance Report.
- However, by participating in the Global Benchmarking Work Group, we are able to compare our KPIs with ANSPs outside Europe as well.
- Increased participaton brings more diversity and diversity provides us with the opportunity to benchmark ourselves to the similar ANSPs. The more, the better!

The Data Dashboard



- The dashboard is built on a multitude of data and it is extremely interactive. It allows us to shape the benchmarking to the best it suits our needs by filtering different KPIs, ANSPs or regions and years.
- It allows benchmarking in a certain year and trend analysis as well through a number of years.
- The most important benefit of the Dashboards for us is that it is available quite soon. Compared to the ACE report that is published in n+2, the dashboard is available next year

GBWG meetings



- Networking is an opportunity that comes with participating in a global work group. It is a benefit that is difficult to monetize. Being part of an international initiative adds a lot to our professional as well as personal development.
- At the GBWG meetings we are able to learn a lot about the other ANSPs in our region, as well as we learn about the other regions as well, that can be a real eye-opener.
- The openness and the respect we show to each other at these meetings is a real value.

Thank you for your attention!



Questions and Answers

How to get in touch



Data support

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GBWG Chair

Diána Galgóczi

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CANSO

Ellen van Ree

ellen.van.ree@
canso.org

Thank you

Visit us:
canso.org

