



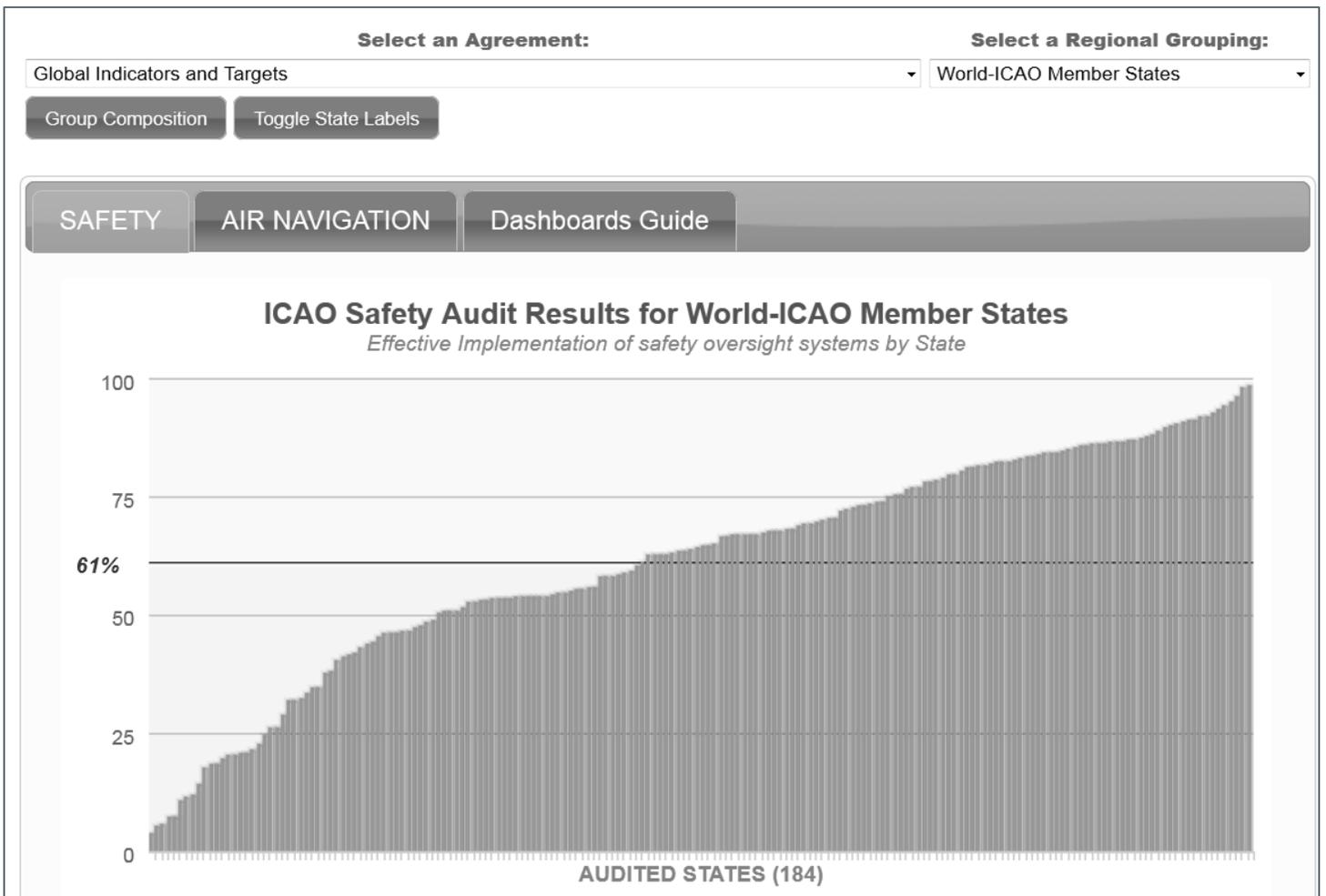
ICAO

UNITING AVIATION

User Guide

Regional Performance Dashboards

Version 1.02 | July 2014



OVERVIEW

Performance measurement is an integral aspect of aviation's pursuit for continuous improvement. Measuring performance not only provides an idea of how the entire aviation system is behaving, but it also offers a feedback mechanism for future tactical adjustments to the Global plans (**Global Air Navigation Plan** and the **Global Aviation Safety Plan**).

Reporting on a global scale provides a consensus notion on the status of global initiatives, allowing for direct feedback on the implementation of the Global Plans. However, measuring performance at the regional level is just as important as it allows for a more in-depth look at how regional differences affect each safety and air navigation environment. This level of information is a key enabler for ICAO's regional offices in prioritizing their resources and work efforts towards achieving operational results.

The Regional Performance Dashboards is one method of ICAO striving for a common language of measurement in the regions. Each region's priorities and targets are visible to the public, facilitating transparency and information sharing on initiatives and implementation progress. The dashboards aim to provide users with ad-hoc reports against the global plans.

A MODERN SOLUTION

The dashboards utilize innovative web technologies to provide up-to-date information, with minimal maintenance effort. This is possible through leveraging of existing analytical capabilities available through SPACE (iSTARS v2.0) REST APIs¹, enabling the dashboards to connect to multiple data sources, make calculations and generate dynamic charts at the click of a button.

To the extent possible, the data used for the dashboards is generated automatically from ICAO and reliable third-party sources. Depending on the source of the data, the figures shown in the dashboard may change periodically. This is the reason why the dashboard is designed to portray information at a higher level by showing the percentage of implementation rather than absolute numbers.

DISCLAIMER

This dashboard makes use of information, including air transport, air navigation and safety related data and statistics, which is furnished to the International Civil Aviation Organization (ICAO) by third parties. All third party content was obtained from sources believed to be reliable. However, ICAO specifically does not make any guarantees or representations as to the accuracy, completeness, or timeliness of such information and accepts no liability or responsibility arising from reliance upon or use of the same.

MORE INFORMATION

For more information about this page, please contact the Air Navigation Bureau at: OfficeANB@icao.int

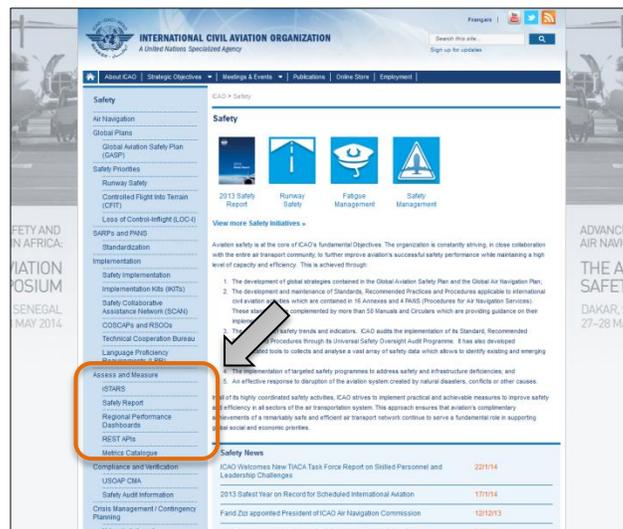
¹ For more information on REST APIs, visit: <http://www.icao.int/safety/Pages/REST-APIs.aspx>

ACCESS TO THE DASHBOARDS

The page can be accessed by the public via the ICAO domain (www.icao.int), through the ① **Safety** or the **Air Navigation Capacity and Efficiency** strategic objective websites. The link to the dashboards is under the left-navigation pane of these sites, under the header ② **“Assess and Measure”**, and through the hyperlink ③ **“Regional Performance Dashboards”**

To directly access the page, the hyperlink is as follows:

<http://www.icao.int/safety/Pages/Regional-Targets.aspx>



DASHBOARDS LAYOUT

VIEW GROUP COMPOSITION

View the list of States in the selected Regional grouping

STRATEGIC OBJECTIVE TABS

View the metrics and targets for the selected region by strategic objective – either by Safety or by Air Navigation

HIGHLIGHT CHART

Highlights the regional implementation of a selected metric – either by safety audit results or the implementation of performance-based navigation.

RELATED DOCUMENTS

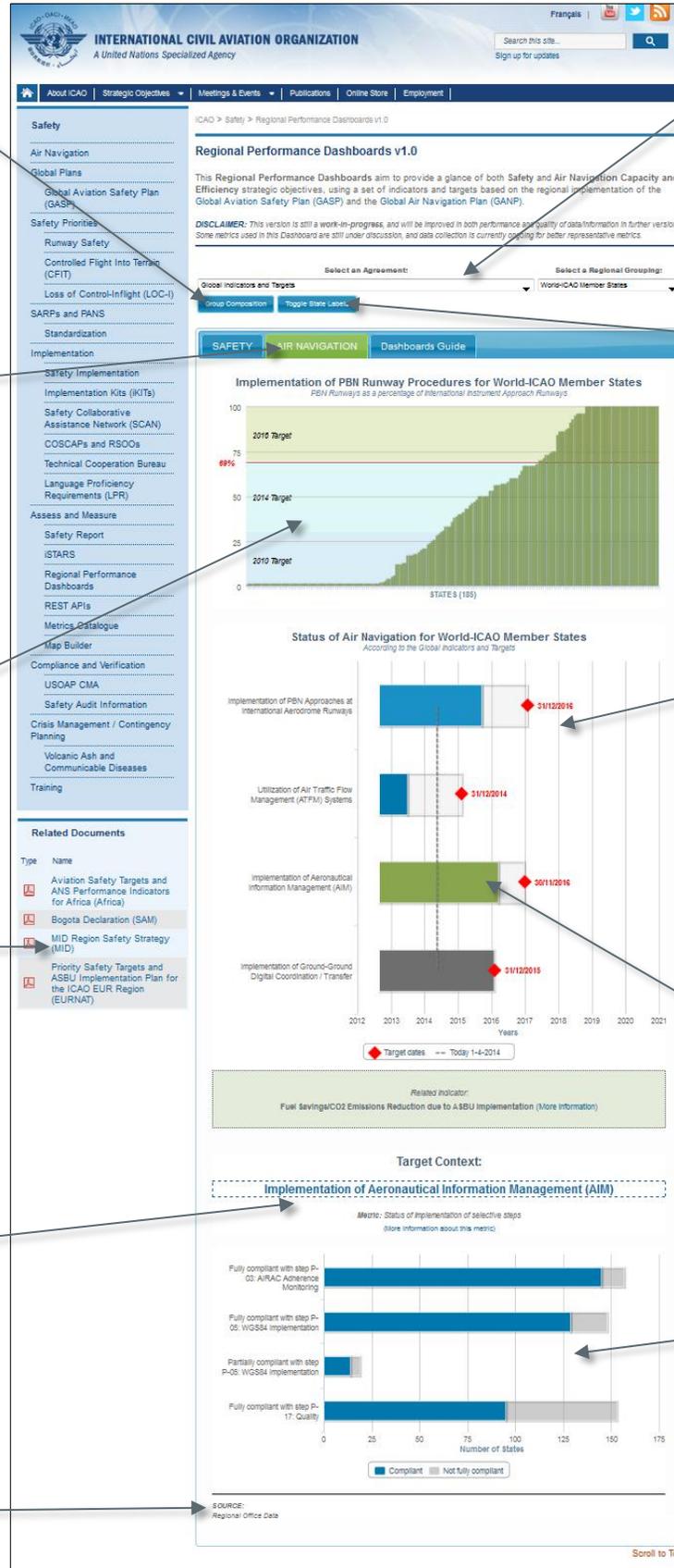
Documentation on actual regional agreements and targets.

TARGET CONTEXT, METRIC, AND MORE INFORMATION

Provides more information for the context of the selected indicator, the metric used to measure it, and a [hyperlink](#) for more information.

SOURCE

Provides information on the source of data being used



SELECTION MENU

Drop-down menu to generate the query based on a combination of an Agreement and a Regional Grouping

TOGGLE STATE NAMES

Include the names of the States in the X-Axis of the Highlight chart

GLOBAL INDICATORS & TARGETS CHART

A dynamic chart showing measurements and target dates, based on the selected Agreement

CLICKABLE INDICATORS

Each bar can be clicked to show a secondary chart, which provides the context, metric, and supplemental details on the indicator.

DETAILED CHARTS

Supplementary information for the selected indicator. This chart will only show when an indicator in the chart above has been clicked.

INTERPRETING THE CHARTS

Highlight Chart



Each vertical bar of the Highlight chart represents a State, with the height corresponding to the level of implementation (either for the safety audit results, or for PBN implementation).

The red horizontal line represents the average of all States in the selected region.

Regionally-Agreed Indicators & Targets Chart



The vertical axis lists all the indicators for the selected agreement. The blue horizontal bars represents progress made on each one of these indicators, and the transparent bars shows the percentage of implementation still left.

The horizontal axis is a timescale in years, and the vertical dashed bar represents the current date, which is very similar to a Gantt chart.

Target deadlines are shown as red diamonds, and the pie chart on the top-right corner is the overall average of all indicators.

Detailed Charts



The top part of the detailed charts shows the context of the selected indicator. The metric used to measure this indicator is written below it. It is important to note this information since some indicators may be difficult to measure or that the proper data is not readily available.

The detailed charts show more information about the clicked indicator. Similar to the indicators & targets chart, the blue bar represents progress and current status, and the transparent bar shows the implementation remaining to reach the target level.

FEATURES

This dashboard has a number of dynamic features to facilitate the measurement and interpretation of regional priorities and targets. Some of the key features are listed below:

- **Selection by Region** – Determining the appropriate regional grouping for any given measurement has always been a challenge, given the complexity of the world. This feature enables the user to select a regional grouping that has been pre-defined in ICAO, and show the aggregation of metrics for only those States in the selected region. More regional groupings may be added as needed.
- **Selection by Agreement** – the Safety and the Air Navigation system are related, but composed of different regional groupings such as the RASG and the PIRGs. As such, this feature allows the user to select any agreement and apply it to any region, as applicable. This can also be used to compare results in different regions, based on common indicators and targets. A suggestion for the regional grouping is included in the name of the agreement to allow for proper measurements (i.e. “Aviation Safety Targets for Africa (Africa)” proposes the use of the “Africa” UN Region).
- **Interactive Tooltips and Clickable Charts** – tooltips show when the user’s mouse hovers over the selected chart. Clicking a horizontal bar in the regionally-agreed indicators and targets chart generates a secondary dynamic chart underneath, which provides more information on the selected indicator. The target context, metric used, and a hyperlink for more information will also be displayed.
- **Near Real-time Information** – Information used in the dashboards is dynamically pulled from the SPACE (iSTARS v2.0) cloud server once the page is loaded, providing up-to-date data.²
- **Browser and Mobile Device Compatible** – the charts in the dashboards feature the same technology used in SPACE (iSTARS v2.0), which is compatible to most modern browsers and mobile devices.

PLANNED FEATURES

The initial version of the dashboards is available starting end of March 2014. More features will be added in the future, including:

- Print to PDF
- Interactive Help Guide
- Additional regional indicators and targets
- Improved metrics / data collection methodologies

² **Note:** the timeliness of the data is dependent on the update cycle of each data source, which ranges from hourly to up to 6 months

VERSION HISTORY

Version 1.02 – July 2014

- General:
 - Added Port-of-Spain Declaration agreement for the NACC Region under the agreement drop-down
 - Added Port-of-Spain Declaration PDF document under “Related Documents”
- AIM:
 - Revised AIM drill-down chart to consolidate P-05: WGS84 Implementation Fully and Partially compliant bars
- Accidents:
 - Revised weight class of accidents from 2250kg to 5700kg
 - Improved tooltips for accident indicators
 - Revised labels of indicators
- PBN
 - Revised interpretation of ‘International Aerodromes’ from ‘Aerodromes with customs’ to “Aerodromes with International Scheduled Departures”
 - Reverted tooltips to show percentages
 - MID Region Safety Strategy: Revised PBN drill-down chart to include LNAV and LNAV/VNAV only
- Aerodrome Certification
 - Revised interpretation of ‘International Aerodromes’ from ‘Aerodromes with customs’ to “Aerodromes with International Scheduled Departures”
 - Reverted tooltips to show percentages
- Miscellaneous
 - Added more hyperlinks under “More Information” for metrics

Version 1.01 – April 2014

Revised Dashboards based on comments from the Regional Offices:

- General:
 - Removed the pie-chart on overall achievement
 - Visibility of pop-up boxes improved
 - EUR Safety Targets labels included (i.e. ST1, ST2, etc.)
 - Added numerical values for the x-axis of the Highlight charts (USOAP and PBN) – e.g. “Audited States (13)”
 - Added information on the sources of data used for each metric
 - Added toggle to show State labels for the highlight charts for PBN and USOAP
 - Revised highlight charts to graphically show States with 0% implementation
 - Added disclaimer stating work-in-progress status of the dashboards
- Accidents:
 - Pop-up explanation provided for the methodology and calculation of the Accidents Indicator
 - Improved labels for Accidents drill-down charts, showing distinction in the metric used between “Gap between the 3-year global and regional accident rates” and “Gap between the 3-year global and regional % of accidents”
- Aerodrome Certification:
 - Drill-down details for Aerodrome certification showing “Small”, “Medium” and “Large” labels removed. Aerodrome traffic size retained for information purpose only.
 - Initiative to gather improved data on aerodrome certification will be start soon
- SSCs:
 - Improved chart legend to show color of transparent bars (e.g. for SSCs, the “unresolved” portion)
- AIM
 - Retention of 2 metrics for WGS84 – the first showing FC and “Not Fully Compliant” (NC, including PC), and the second showing PC and NC figures

- PBN:
 - Fixed bug where some bars show no State names, or show no association with any State
 - Fixed size of drill-down chart to ensure that all labels are shown properly
 - Removed the target levels for PBN types (i.e. RNP AR, LPV, etc.), and added label “[INFO]” to show that these are for information only
 - Changed the title of the PBN Highlight chart to “Implementation of PBN Runway Procedures for...”
 - Clarified PBN target context by adding the label “including LNAV-only minima” to “Implementation of approach procedures with vertical guidance (APV), including LNAV-only minima, for all instrument runway ends by 2016”
 - Added % levels for drill-down charts, to show the same information in the PBN Application in iSTARS
 - *PBN data on the number of International aerodromes/runways to be improved soon*
- Environment
 - Fixed the typo for Emissions
 - Removed the bar chart and instead provided a hyperlink for more information about the topic. Bar chart will be reinstated after finalization of environmental study and data collection
- Ground/Ground Coordination
 - Improved label by showing “Information not available” instead of “0% Implementation”
 - *AIDC information collected – representation by Regional Group (by FIR) will be included soon*
- ATFM
 - *ATM Information collected – representation by Regional Group (by FIR) will be included soon*

Version 1.00 – March 2014