



# Twenty Second (22<sup>nd</sup> ) Meeting of AFI Satellite Network Management Committee

Lome ,Togo 15-19 December,2014  
Agenda item 5: WRC-15 & ATU RELATED  
MEETINGS

Presented by Ghana



# 1.INTRODUCTION

## 1.1 New Agenda Item for WRC-15:

*Global Flight Tracking for Civil Aviation*



# ITU Press Release of 31 Oct. 2014:

*'ITU World Radiocommunication Conference will consider spectrum allocations for global flight tracking'*

*'ITU Plenipotentiary Conference resolution to enhance aviation safety'*



# PP-14 and a New Agenda Item

*considering*

[...]

that ICAO, in its special meeting on global flight tracking, Montreal, 12-13 May 2014, encouraged ITU **to take action, at the earliest opportunity**, to provide the necessary spectrum allocations for satellite when emerging aviation needs are identified,

[...]

*resolves*

to instruct WRC-15, pursuant to No. 119 of the ITU Convention, to include in its agenda, **as a matter of urgency**, the consideration of global flight tracking, including, if appropriate, and consistent with ITU practices, various aspects of the matter, taking into account ITU-R studies

RESOLUTION COM5/1 (Busan, 2014)



# African common proposal to PP-14 on this topic

- Proposal made specific reference to satellite based ADS-B for which the relevant ITU-R studies have already started.
- Proposal resolved to request WRC-15 to consider the spectrum requirements for global flight tracking, including possible frequency allocations to satellite services used for safety of life aviation applications, limited to systems that operate in accordance with recognized international aeronautical standards.

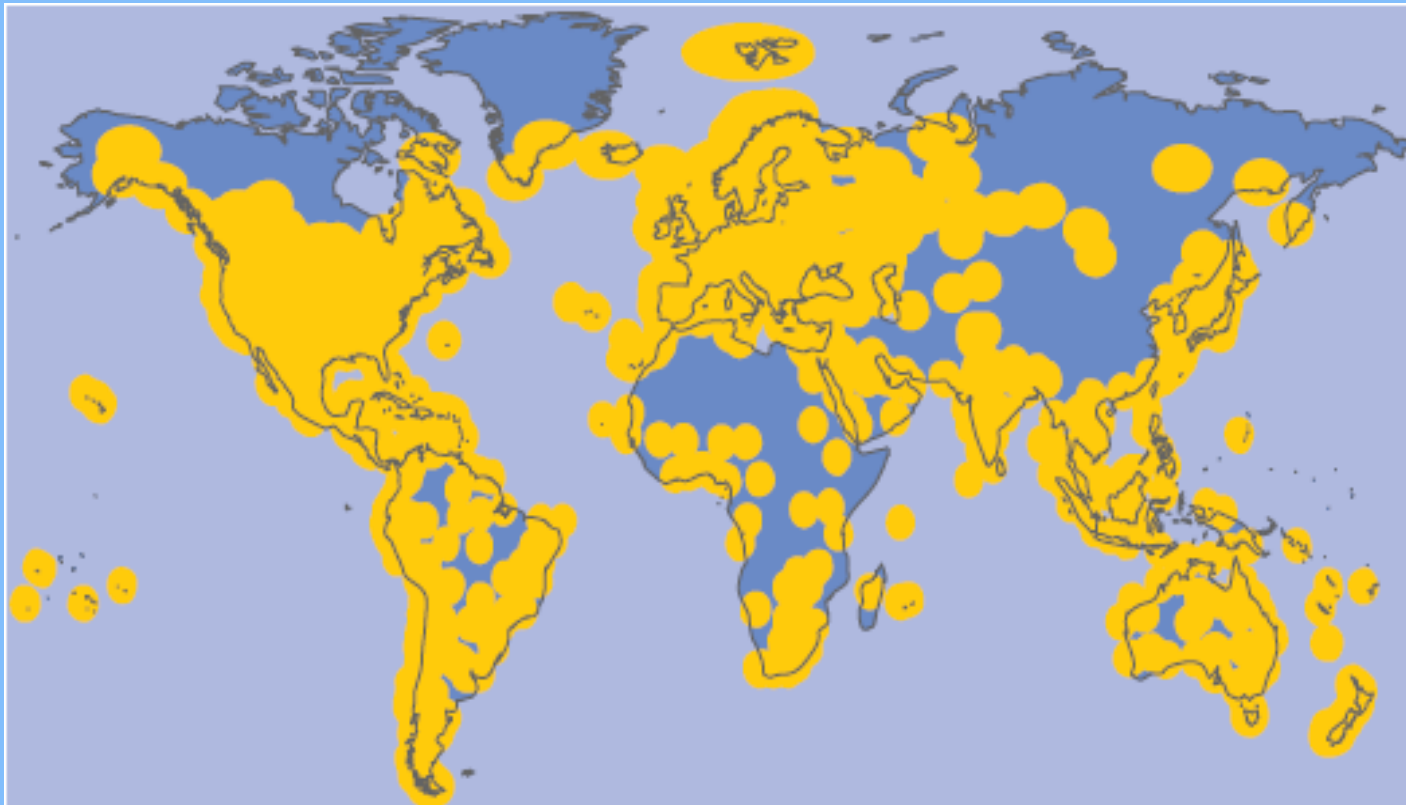


# NEW WRC 15 ITEM

- How IS THIS NEW WRC- 15 ITEM PARTICULARLY RELEVANT AND IMPORTANT TO OUR CONTINENT?



# Limitations of terrestrial surveillance coverage



Picture shows existing civilian radar & ADS-B coverage in operation today – less than 10% of the Earth is covered!  
Many gaps surveillance gaps in Africa



# ADS-B: Global Flight Tracking and Enhanced Aviation Safety

WRC-15 can enable ADS-B via satellite to:

1. Provide **truly global** coverage to polar regions and other areas not currently covered.
2. Make available **more accurate** reporting every 0.5 seconds (instead of every 15 minutes).
3. Improve resolution: ADS-B resolution can be as high as 125m (compared to 225km for ADS-C ).





# Benefits to Africa

Improve aviation safety in Africa and help achieve targets and plan of action as adopted by the African Union Abuja Declaration on Aviation Safety in July 2012.

Satellite based ADS-B will allow Africa to introduce more rapidly and cost-efficiently this modern surveillance means, thus leap-frogging other expensive primary surveillance methods such as radars.

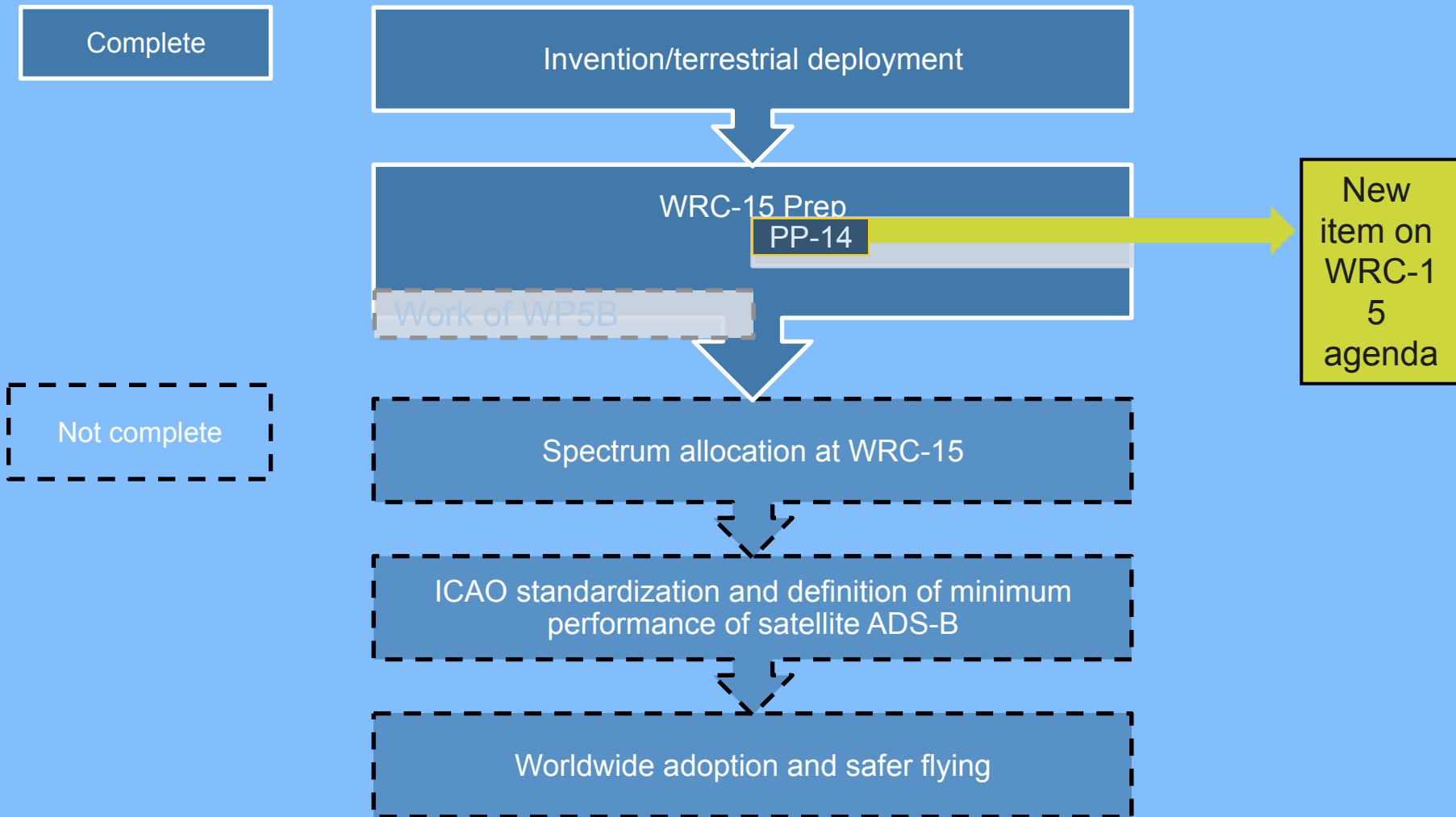


# SOLUTION PROVIDED

How close are we to a solution?



# Roadmap to Safer Flying





# RES COM5/1

## PP-14 Chairman of the Plenary:

*I would like to congratulate this Plenary for this decision to place on the agenda of WRC-15 this very important item. We are now in a position to move in a direction which will truly be in harmony with what has been requested by the international community, **without constraining or prejudicing studies and decisions of WRC-15.***



# RES COM5/1

- Recognises  
“that studies relating to global flight tracking are ongoing in the ITU Radiocommunication Sector (ITU-R)”
- Director of Radiocommunication Bureau invited ITU-R WP5B and WP4C  
*“to complete, as a matter of urgency, the corresponding studies, including any guidance on possible courses of action to be taken by WRC-15.”*



# ITU-R WP5B

- Working on preliminary draft new report on satellite ADS-B since 2013
- Last meeting progressed work towards a conclusion
- WP5B responded to PP-14 Resolution by establishing special meeting, with limited remit to:
  - Complete satellite ADS-B Report
  - Draft report on Global Flight Tracking



# What Allocation is Required?

- Terrestrial ADS-B currently uses frequency allocation to aeronautical mobile (R) service (AM(R)S) at 1090 MHz.
- Satellite reception of ADS-B signals will require frequency allocation in same band to aeronautical mobile-satellite (R) service (AMS(R)S) in Earth-to-space direction.



# CONCLUSION

- The meeting is invited to:
  1. Take note of this information.
  2. Participate actively in your national WRC-15 preparatory meetings.
  3. Ensure administration participates actively in the regional WRC-15 preparatory meetings, relevant ITU meetings and WRC-15 to support a frequency allocation at 1090 MHz to the AMS(R)S.





# List of some upcoming meetings

- 3<sup>rd</sup> ATU WRC-15 preparatory meeting - 26-30 January 2015 (Abuja)
- 2<sup>nd</sup> Session Conference Preparatory Meeting (CPM) – 23 March-2 April 2015 (Geneva)
- Special WP 5 B meeting – 11-15 May 2015 (Geneva).
- World Radiocommunication Conference 2015 – 2-27 November 2015 (Geneva).



- Thank you for your valued attention.