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UNITING AVIATION

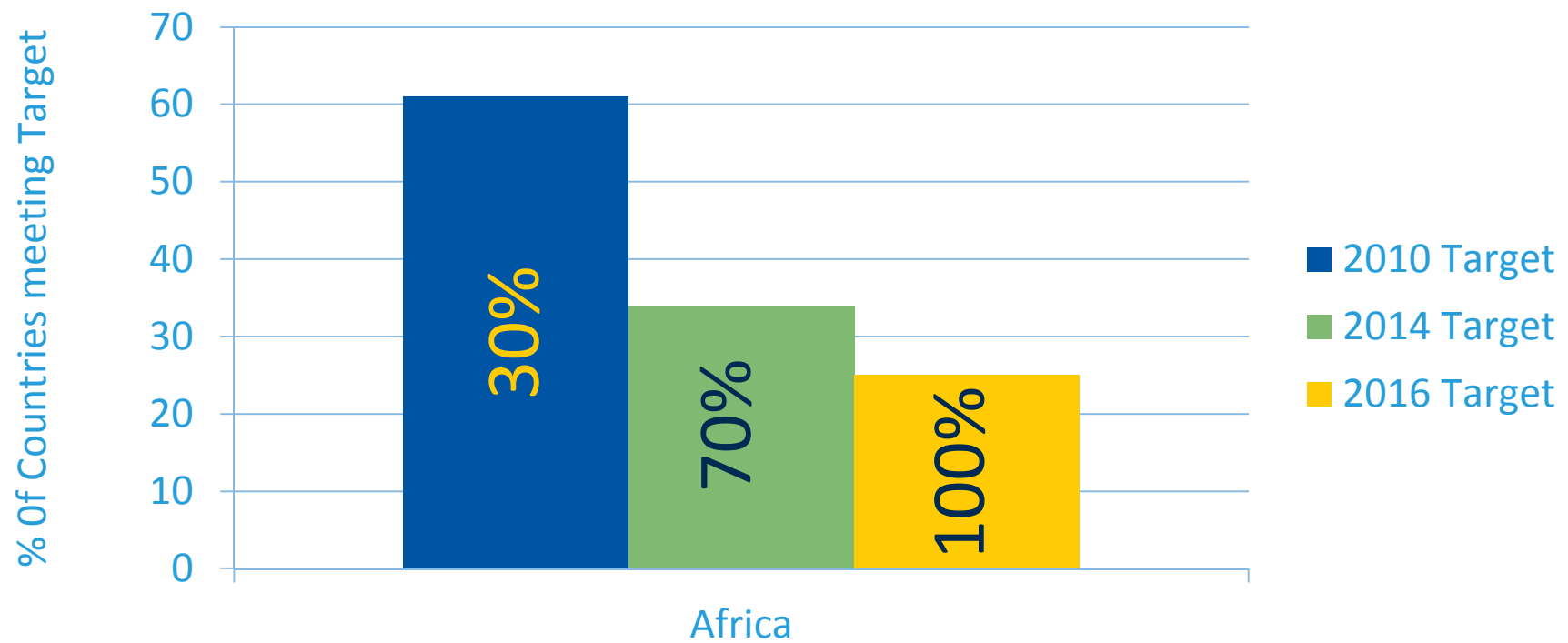
# *National PBN Implementation Plans Objectives*

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## National PBN Implementation Plan






# A37-11 Targets - Africa





## National PBN Implementation Plan

### **Improve Safety of Approach Operations**

-  Implement PBN instrument approach procedures
-  Meet A37-11 timelines
  -  Mid term- 2013-2016 Implementation targets.
  -  RNP APCH (APV) (Baro-VNAV or Augmented GNSS) in 100% of instrument runways where practical, by 2016
  -  RNP APCH (LNAV only minima) in 70% of instrument runways by 2014, 100% by 2016

### **Improve efficiency of flight paths**

-  Airspace optimization
-  Properly connecting En Route-to-TMA
-  Enable CDO/CCO operations

### **Starting Point**

-  The National PBN Implementation Plan



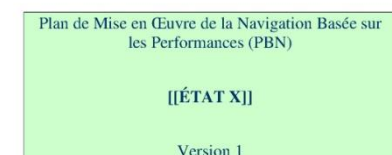
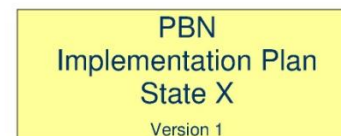
## National PBN Implementation Plan

### **The National PBN Implementation Plan**

- Develop the Plan
- Complete the existing Plan; or
- Enhance the existing Plan

### **Template Plans**

- ICAO, 2009
- ASECNA, 2009



### **Existing Plans**

- African States

December 2009



## National PBN Implementation Plan, **Strategic Objectives**






### **Timeframes**

-  Near Term (2008-2012); and
-  Mid-Term (2013-2016)

### **2 key navigation concepts**

-  Area Navigation (RNAV) in surveillance environment; and
-  Required Navigation Performance (RNP) in non-surveillance environment



### **Encompasses**

-  Instrument approach;
-  SIDs and STARs;
-  En Route continental , oceanic and remote operations;
-  Airspace design review; and
-  Terminal and flight-deck automation



## National PBN Implementation Plan, **Strategic objectives**

### **CNS/ATM system**

-  Ensure implementation of navigation portion of CNS/ATM system; and
-  Based on clearly established operational requirements

### **Ground and board system/equipment**

-  Avoid unnecessarily imposing the mandate for multiple equipment on board or multiple systems on the ground

### **Airworthiness and operational approvals**

-  Avoid the need for multiple airworthiness and operational approvals for intra- and inter-regional operations

### **ATM operational requirements**

-  Prevent commercial interests from outdoing ATM operational requirements, generating unnecessary costs for the State as well as for airspace users



Thank You