Responding to the Counterfeit Challenge: Lessons Learnt To Date

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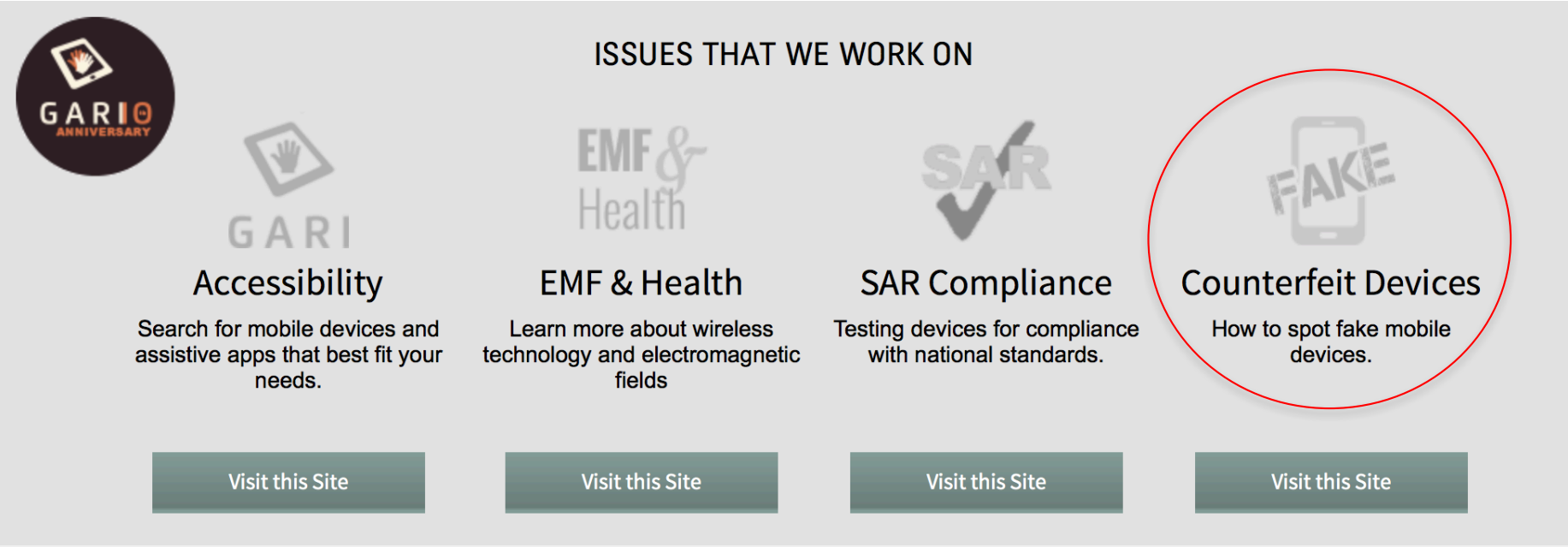
Introduction

- International non-profit association of telecommunications equipment manufacturers with an interest in mobile or wireless communications.



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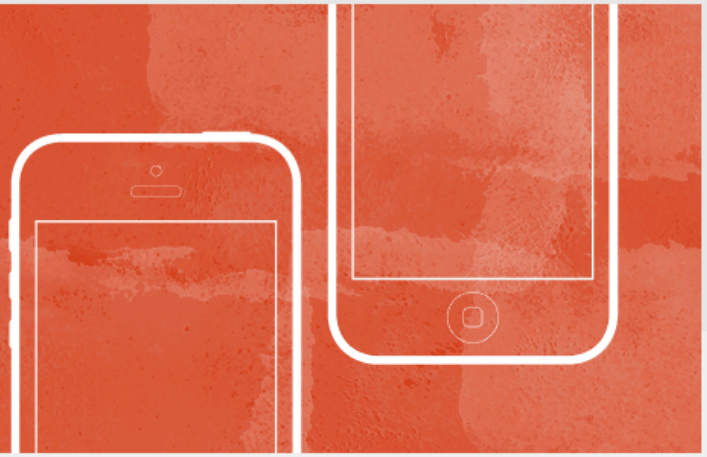
Spot a **Fake** Phone

Home | How To Tell | Why buy Genuine | Publications | Report a Fake | FAQ

Is your mobile phone COUNTERFEIT?

Counterfeit phones and accessories are a multi-billion dollar business controlled by organized crime. Don't buy into it!

How to Tell



What's so bad about fake phones?

CONSUMER IMPACT

Buying a fake phone can pose a health risk to you and loved ones who use the device. Other drawbacks, such as network disruption and poor product quality makes buying genuine the clear choice.

NATIONAL IMPACT

With counterfeiters evading taxation, many countries are losing a great deal of revenue, including sales and value added taxes as well as various duties and associated government charges.

INDUSTRY IMPACT

Black market phones cost the mobile phone industry billions of dollars in lost sales every year. According to some reports counterfeit black market phones made up around 10 per cent of worldwide sales in 2010.

Learn more

PUBLICATIONS

INFOGRAPHIC: Is your mobile phone counterfeit?
November 2017

New report finds counterfeit smartphones cost mobiles industry EUR 45.3 Billion
February 2017

SEE ALL

WHO WE ARE

MWF Mobile & Wireless Forum

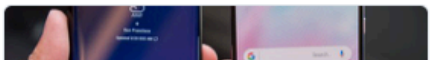
The Mobile & Wireless Forum (MWF) is an international association of companies with an interest in mobile and wireless communications including the evolution to 5G and the Internet of Things. The MWF focuses on a range of issues concerning mobile and wireless devices including RF health and safety, certification testing standards and requirements, counterfeit issues and accessibility.

MWF WEBSITE

Tweets by @spotafake

spotafake
@spotafake

Counterfeiting Samsung's high-end products is big business in China. AnTuTu's 2017 knock-off smartphone report estimates that there are many millions of knockoffs in the market. androidauthority.com/spot-fake-phon… #counterfeit #smartphones #knockoff #phones



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Colombia Case Study

- Government strategy to combat the use of stolen, counterfeit and substandard mobile phones.
- The implementation phases:

	MAY 2013	OCT 2016	FEB 2017	MAY 2017	OCT 2017
NOT REGISTERED					
NOT VALID					
WITH NO FORMAT					
NON-HOMOLOGATED					
DUPLICATED					

- The MWF requested access to some of the IMEI's that had been blocked for analysis.
- Resulting in 6.7m IMEI's covering 20 month period.

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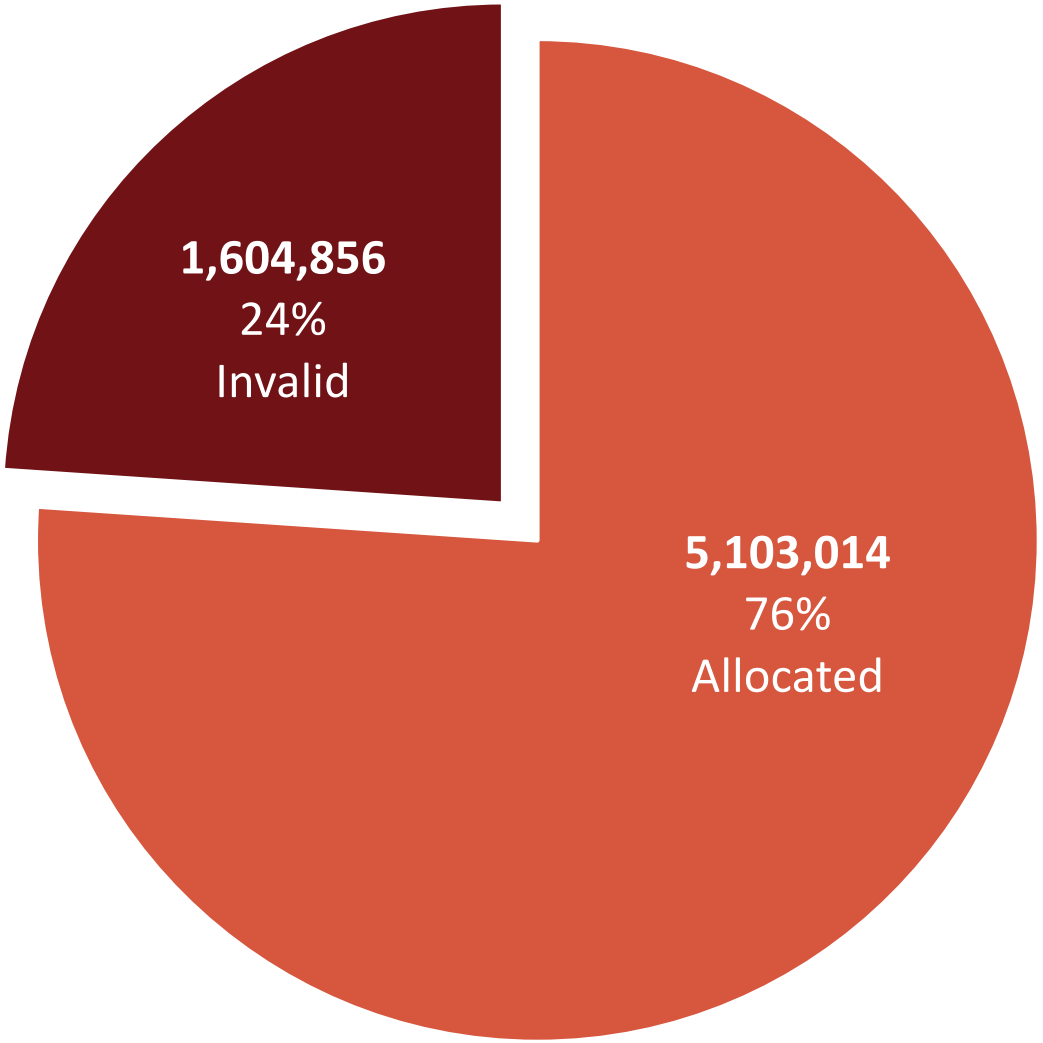
Colombia Case Study

- Data Collection: Nationwide
- Data Period: January 2016 to August 2017
- Fields included:
  - IMEI
  - Reasons for Blocking
  - Date Blocked
- Total number of blocked IMEI's analyzed: 6.7m
- Definitions:
  - **Allocated:** The IMEI is formed from a GSMA allocated TAC.
  - **Invalid**: Includes not matched in GSMA database, malformed, designated as a test TAC.
  - **TAC Aged**: An IMEI with a TAC older than the average lifespan of a device (6yrs). These IMEI's may represent the original device or may include devices designed to deceive.

Breakdown of Blocked IMEI's



Jan 2016 – Aug 2017

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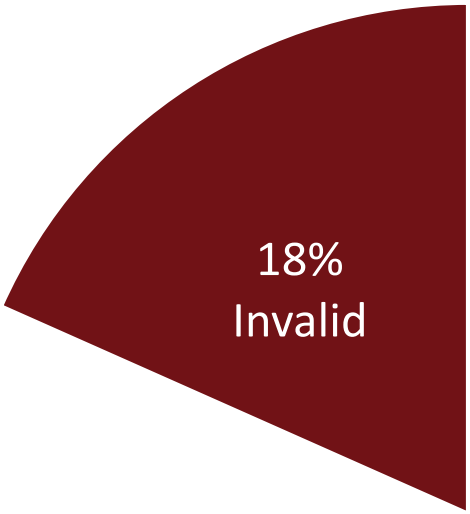
Invalid IMEI's Are Decreasing



More recent data has shown that invalid IMEI's have fallen to around 18%

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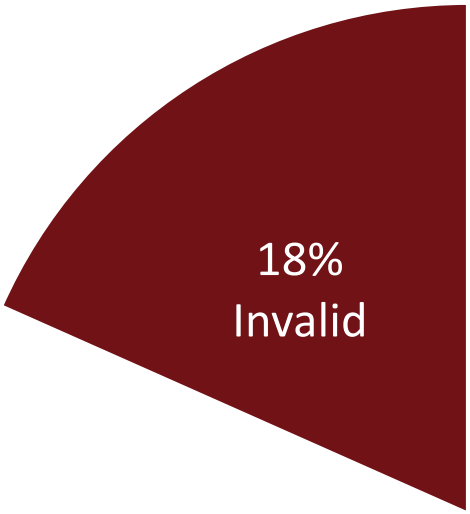
Invalid IMEI's Are Decreasing



More recent data has shown that invalid IMEI's have fallen to around 18%

With the 3 month blocking period for invalid IMEI's reduced to 48 hours - this percentage should further decrease.

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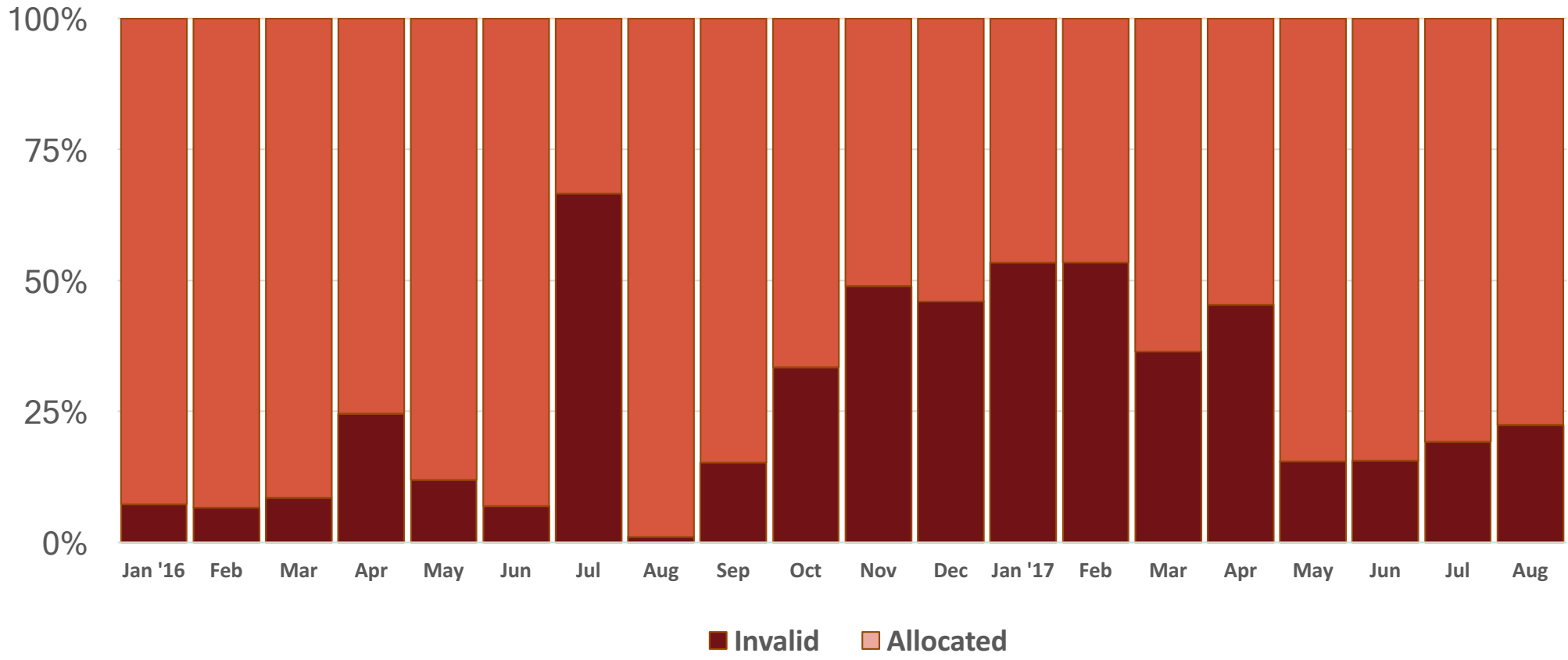
Invalid vs Allocated IMEI's by Month



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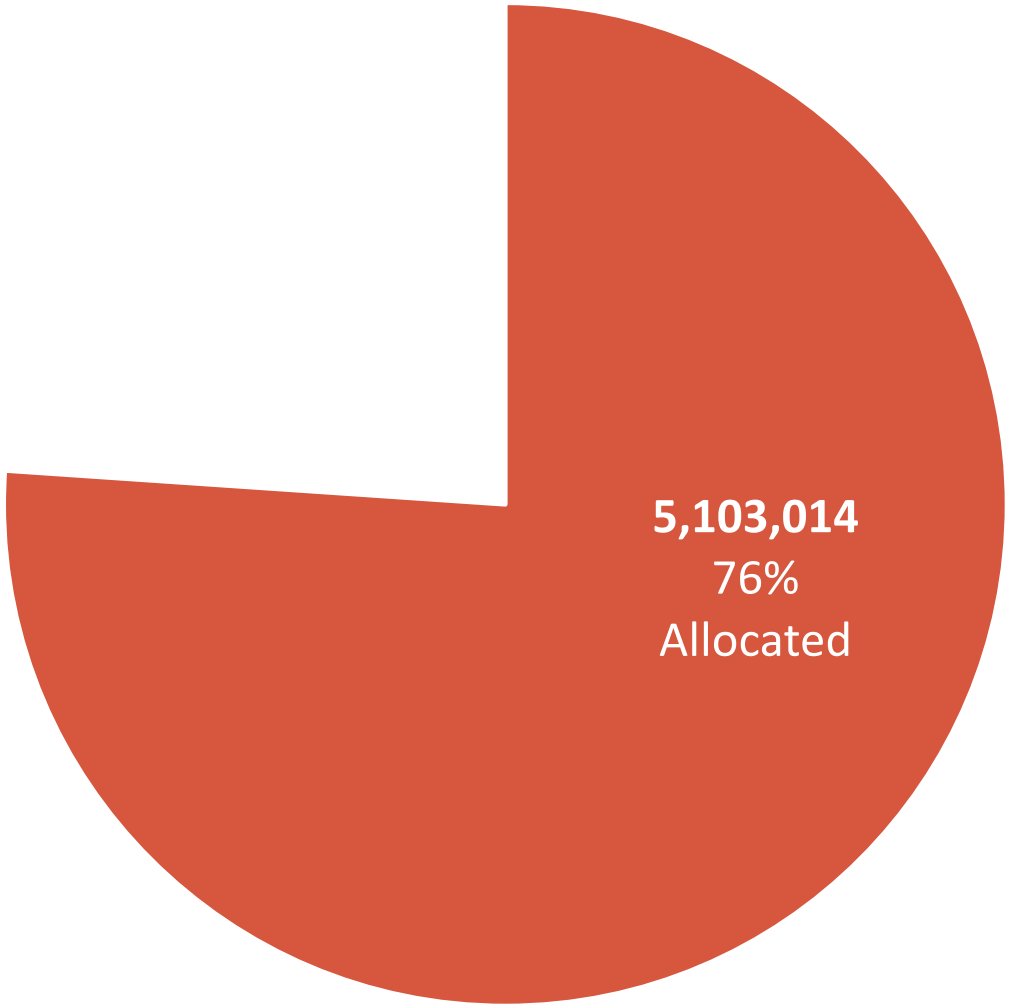
Looking at Blocked IMEI's (Allocated)



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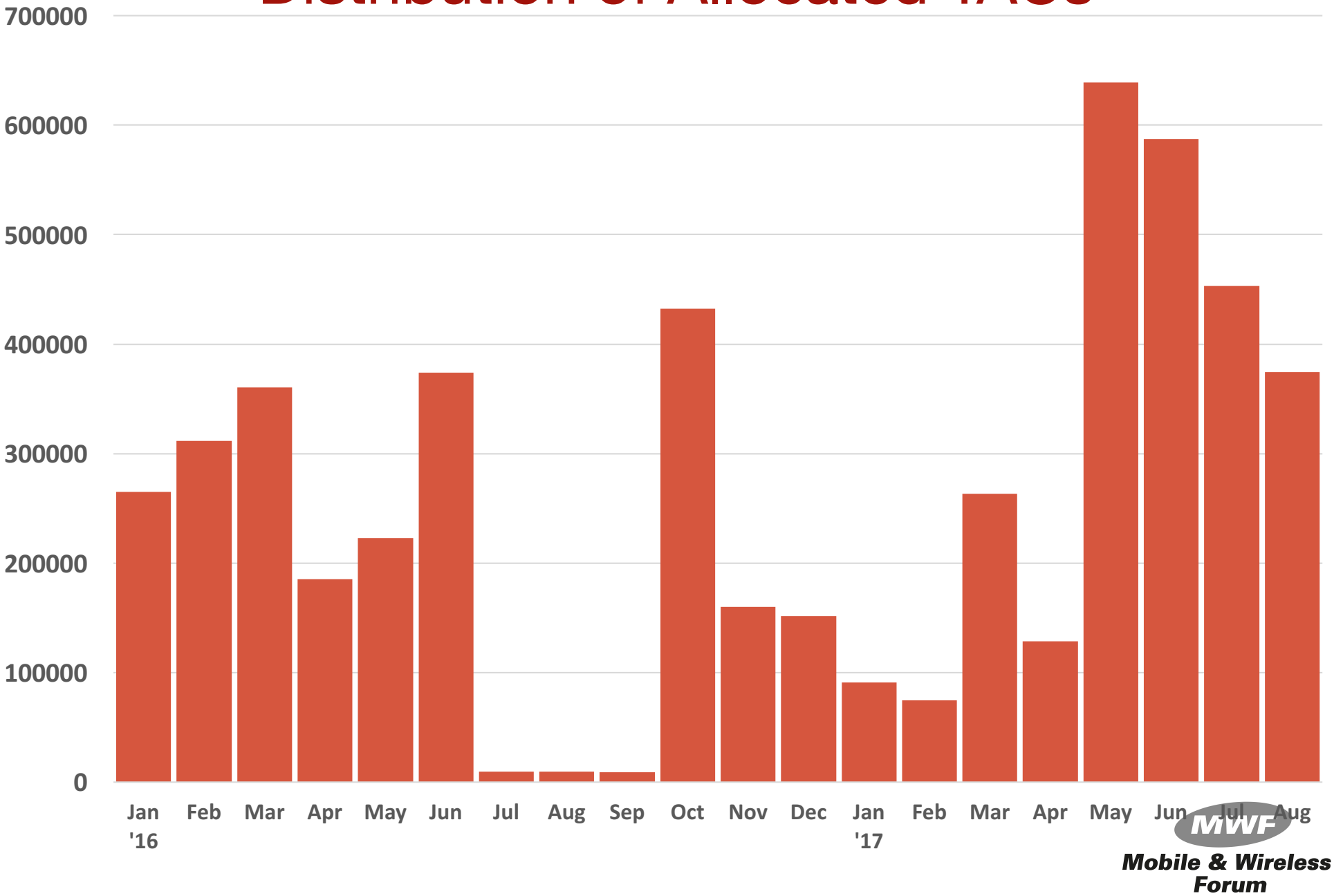
Distribution of Allocated TACs



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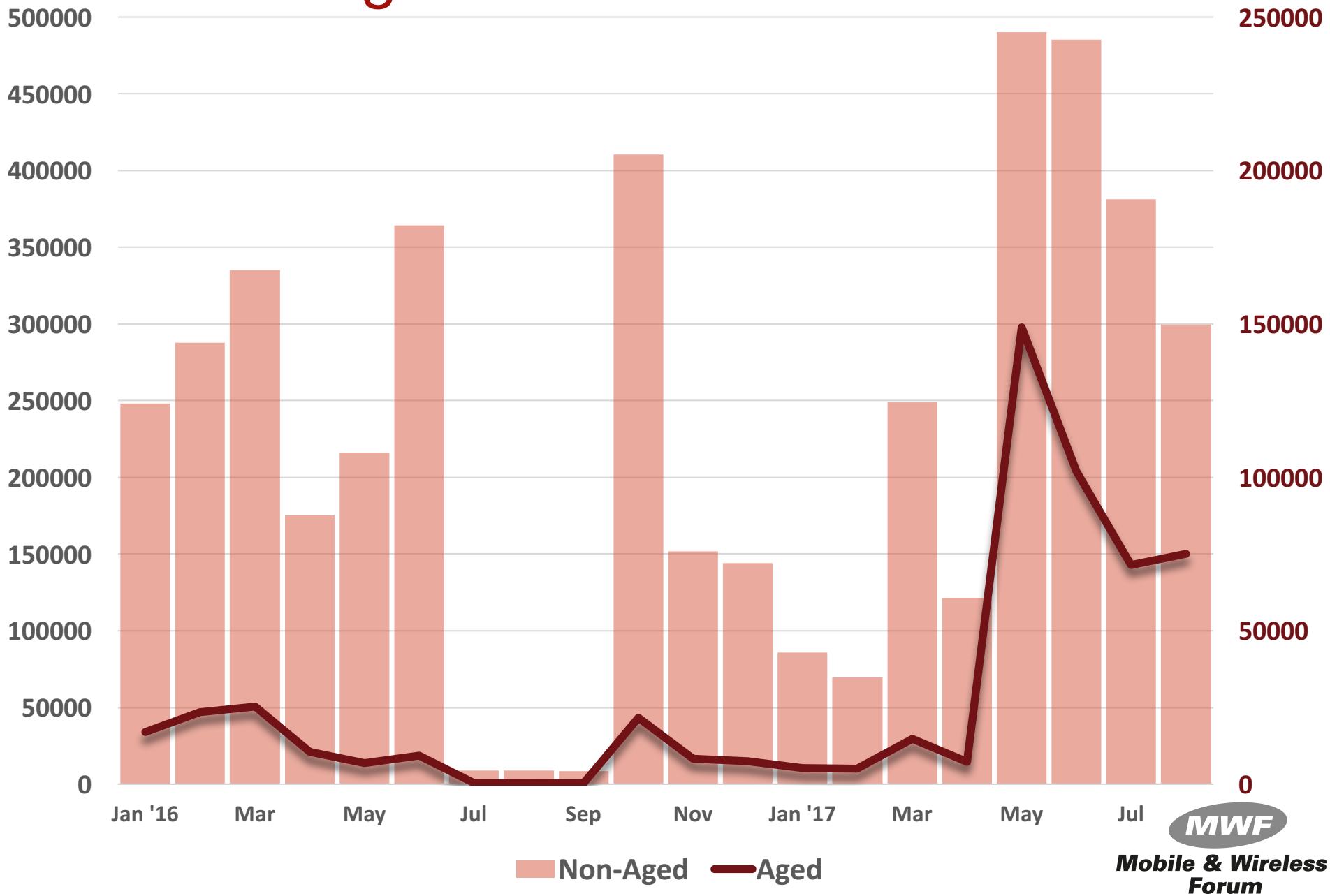
Age Distribution of TACs



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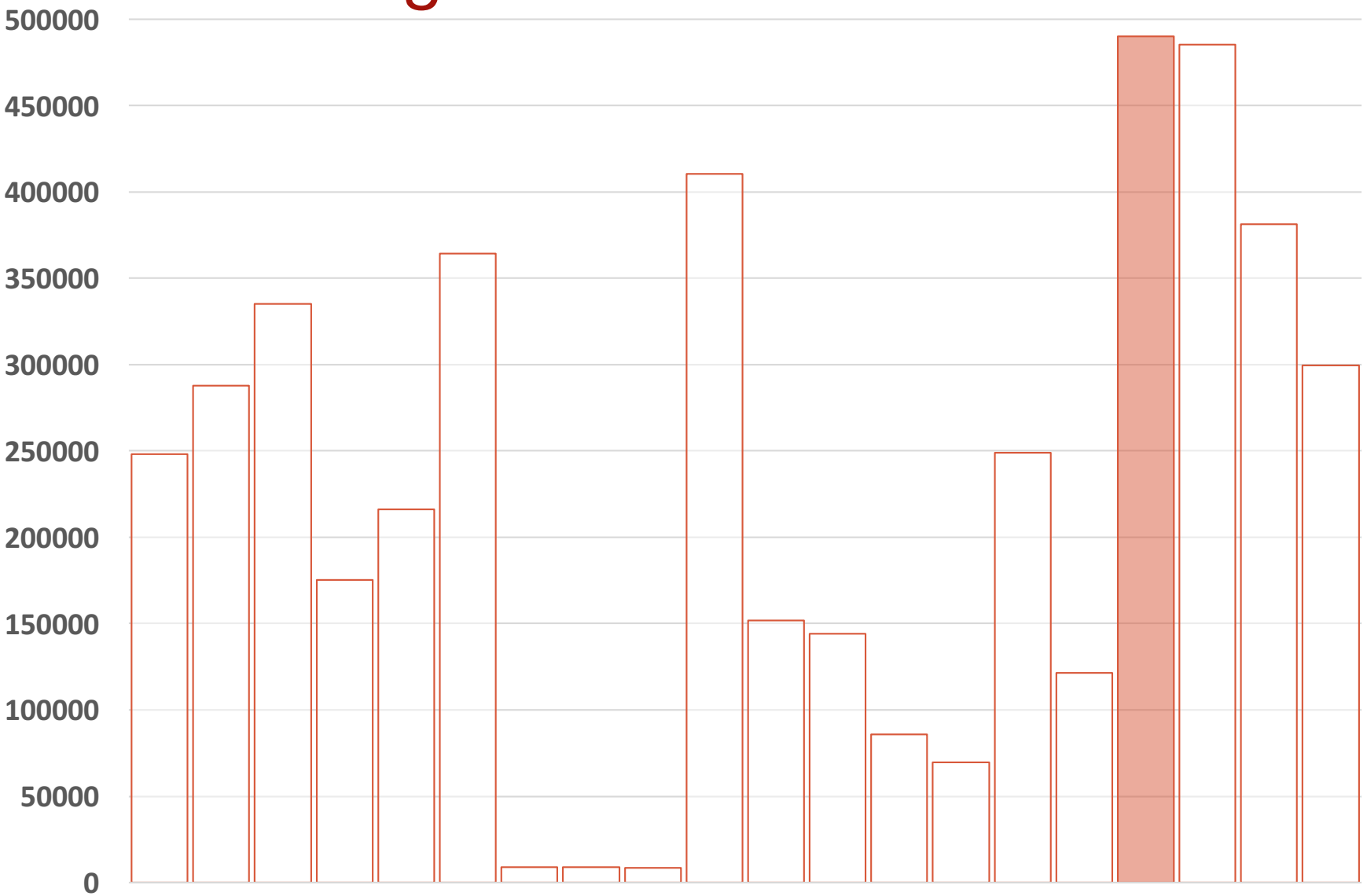

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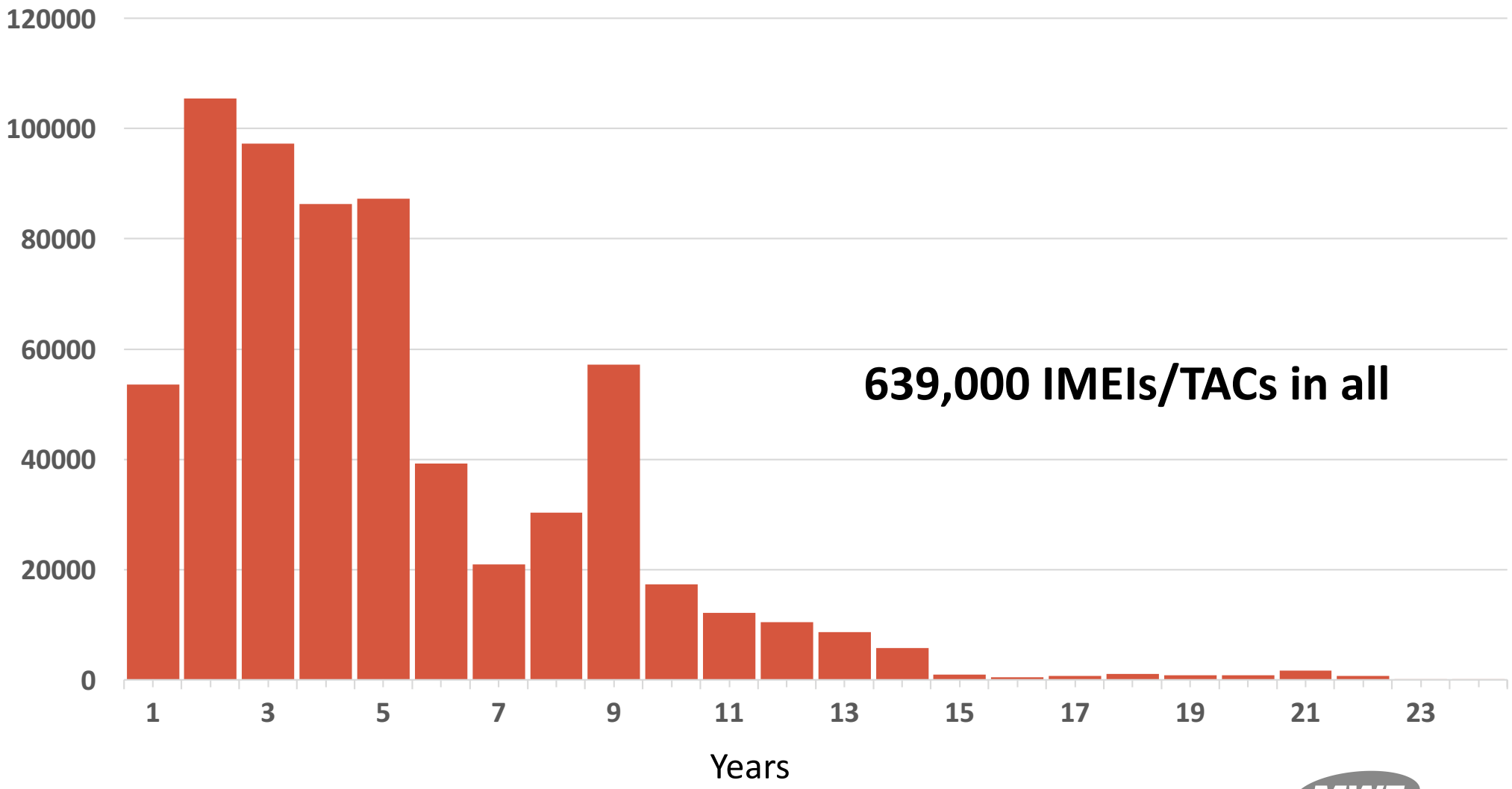
Age Distribution of TACs – May 2017



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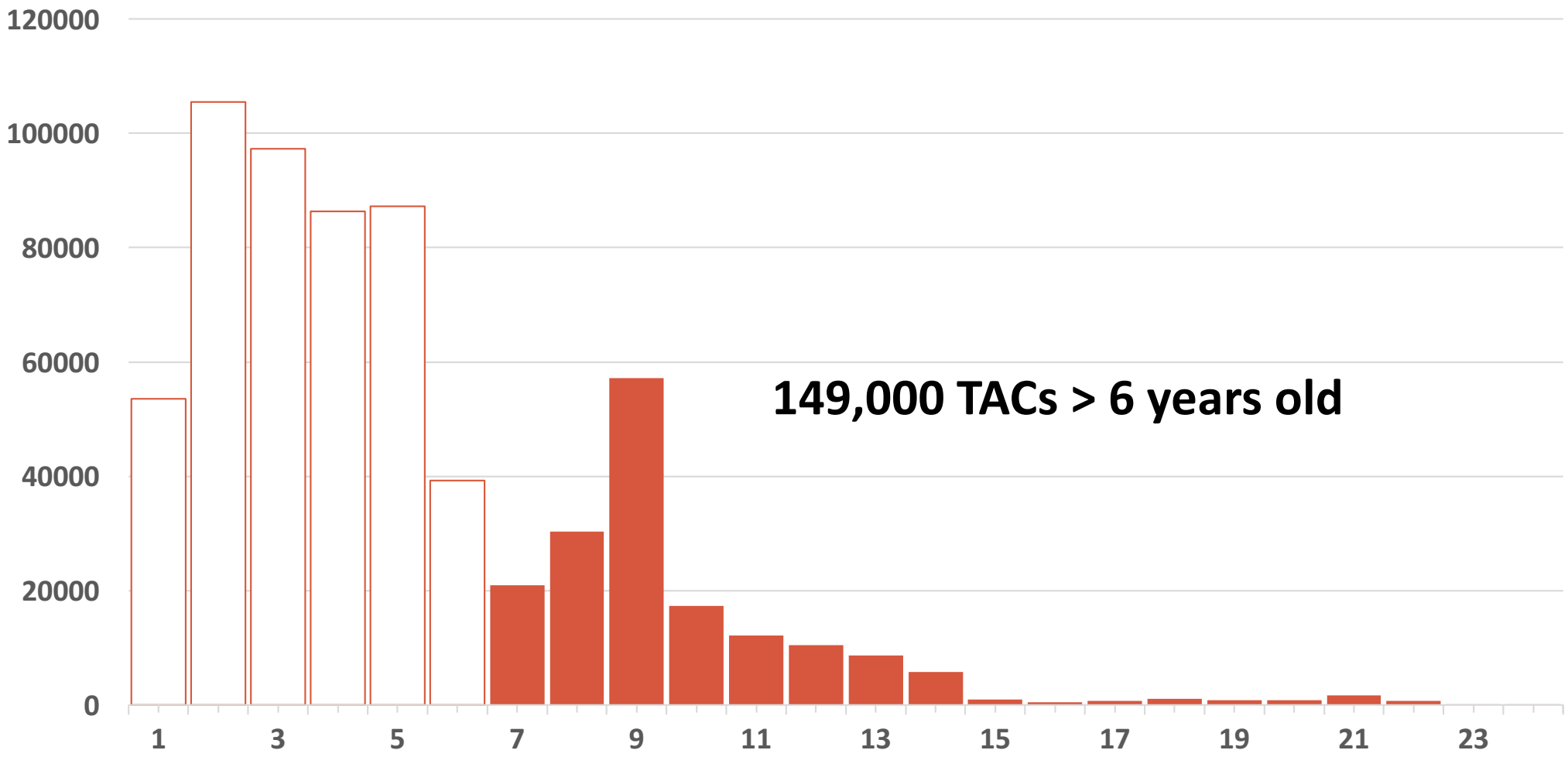

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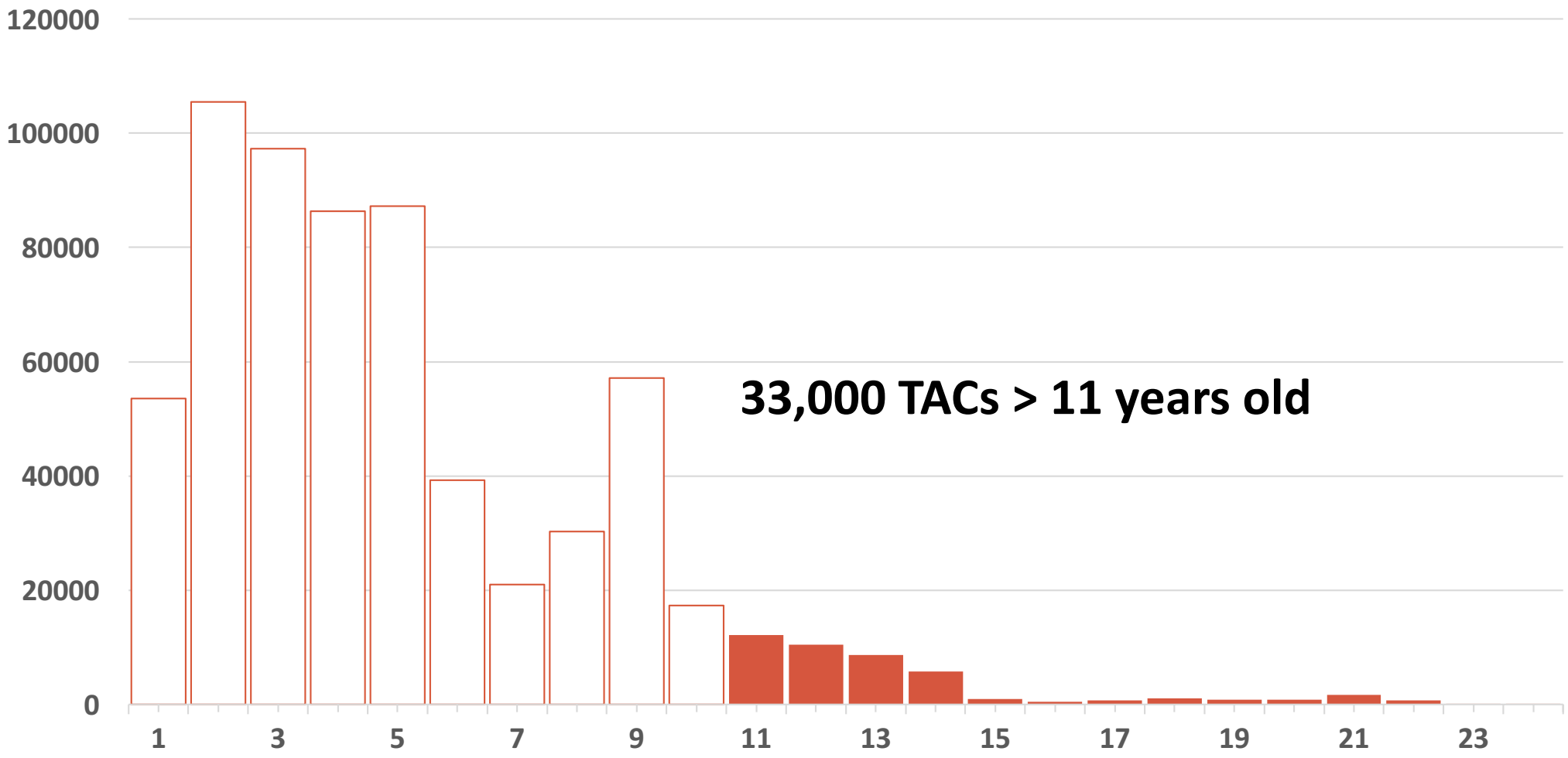

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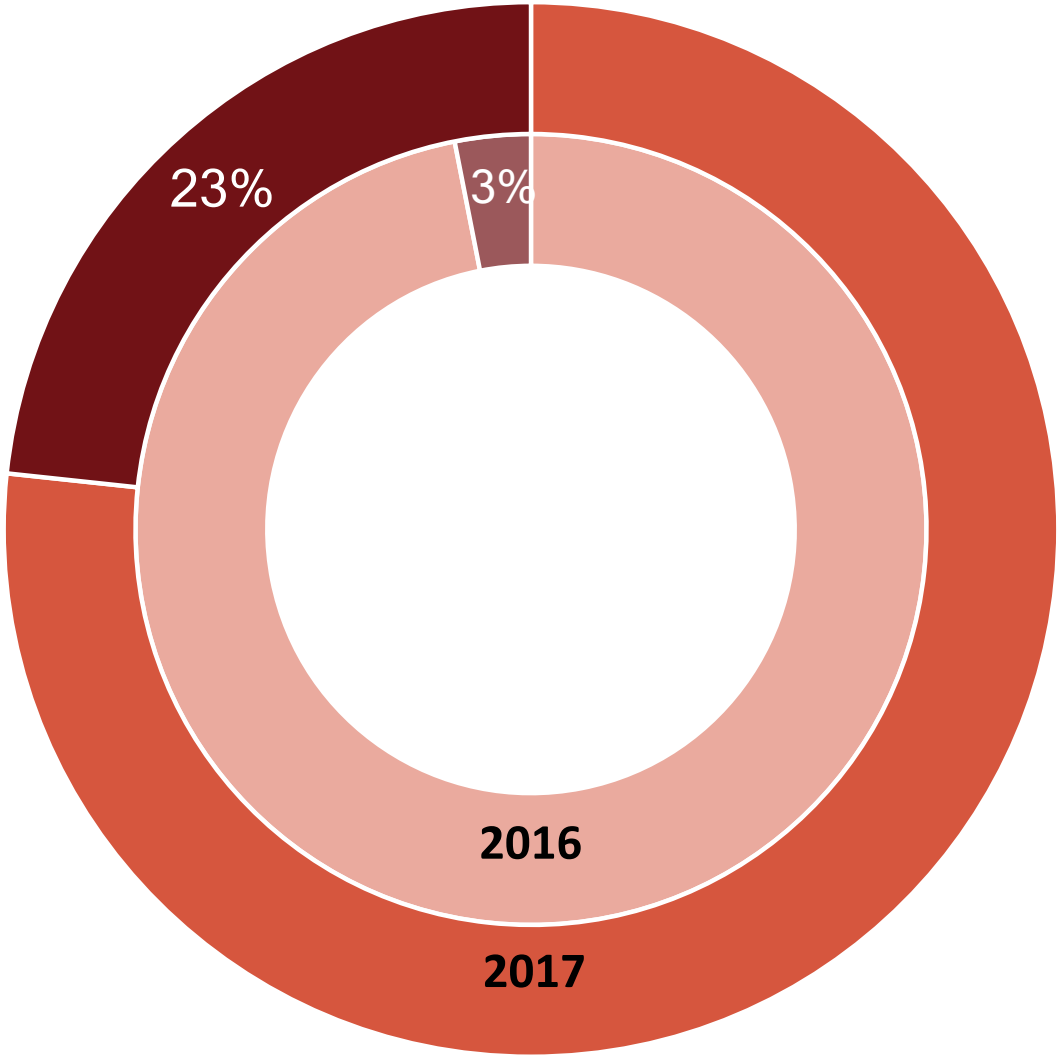
Age Distribution of TACs – May ‘16 vs ‘17



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Colombia Case Study

- Some observations based on the data:
  - The prevalence of ‘Invalid’ IMEI’s suggests reprograming
    - Significant percentage and number of all devices blocked
    - Reducing grace period (48Hrs) – likely to defeat reprogramming
  - ‘Aged TAC’s’ also appeared to be on the rise throughout the period.
    - When a device becomes TAC ‘Aged’ is subjective
    - But also questionable whether such numbers of old devices still in operation.
  - One question remains as to whether some of the devices were programmed with ‘Invalid’ or ‘Aged TAC’s’ as a way to try to get around the system.
    - However they ultimately failed - which is very positive for the blocking scheme.

Conclusions

- The Colombian experience shows that a national blocking system can be very effective.
  - 6.7m IMEI's in 20 months (17m from May 2013).
  - 24% IMEI's outright 'invalid'
  - 76% IMEI's evaded homologation or registration
- Shows the extent to which there is a very organized effort to:
  - defraud governments and manufacturers,
  - circumvent controls
  - deceive consumers and
  - negatively impact operators.
- As a result - we encourage Governments to adopt similar schemes

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THANK YOU

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