Next Steps for WHOIS Accuracy
Global Domains Division

ICANN 53 | 24 June 2015

Agenda: Next Steps for WHOIS Accuracy Reporting System

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Q & A

WHOIS ARS Introduction

Background and Goals

WHOIS activities at ICANN

- Policy, Implementation, Technical

Where does WHOIS ARS fit?

- Major implementation initiative
- 2012 WHOIS RT and GAC Advice
- Key objective: systematically improve accuracy

Multi-phase project

- Public reports
- Compliance component

And now for the detail.

WHOIS ARS Background and Goals

Mandate

⊙ The Board directed the CEO to establish a project to:
  - Proactively identify inaccurate gTLD registration data, exploring the use of automated tools
  - Forward potentially inaccurate records to registrars for action
  - Publicly report on the resulting actions to encourage improvement

Objective

⊙ Identify and report in a way to improve quality of the data in the WHOIS

Phased Implementation of WHOIS ARS Project

0

Pilot: Proof of Concept
Tested processes for data collection and validation.
Completed March 2015

NOW

1

Phase 1: *Syntax Validation*
Is the record correctly formatted?
Target Report: August 2015

2

Phase 2: *Operational Validation*
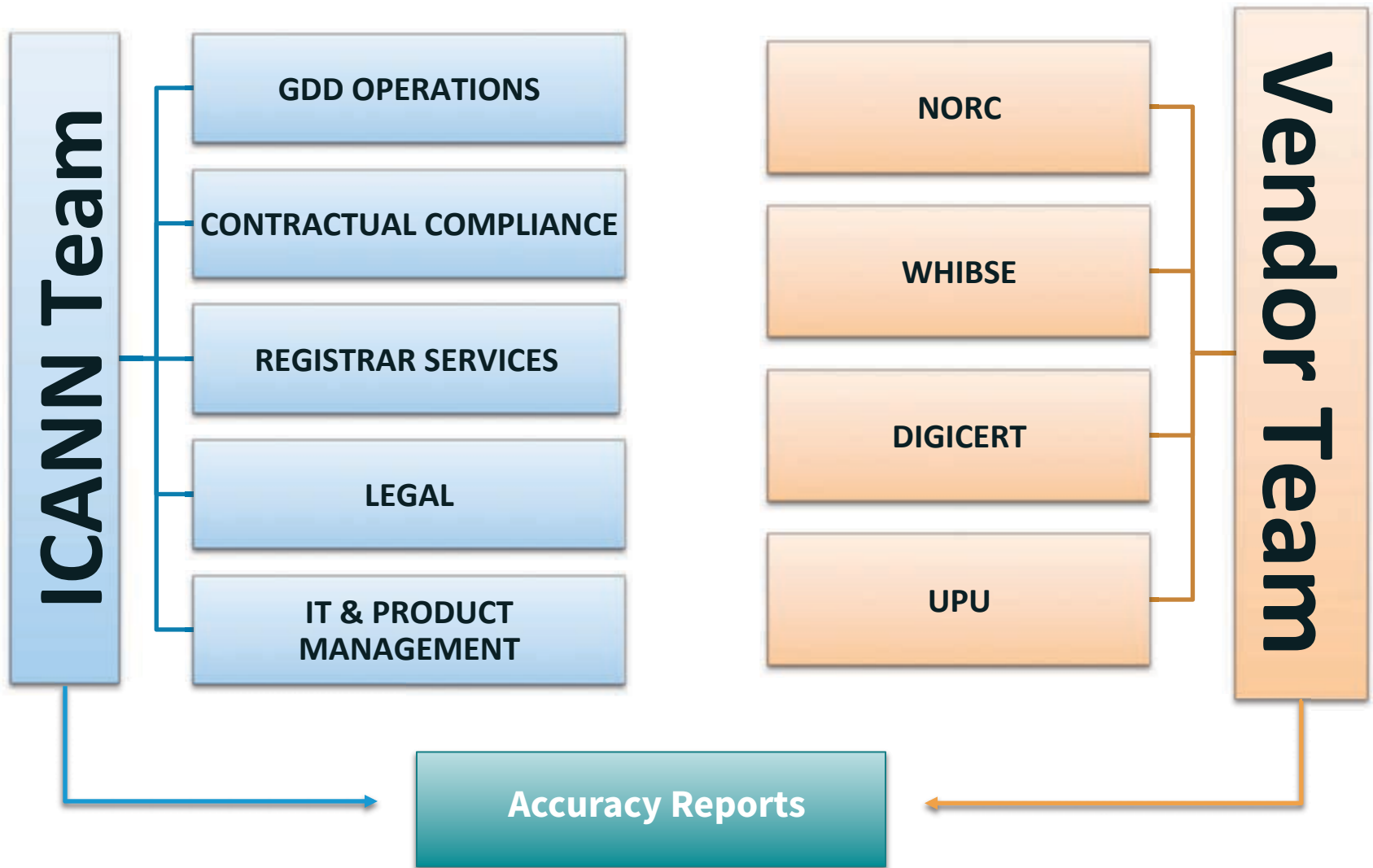Does the email go through, phone ring, mail deliver?
Target Report: December 2015

- -

3

Phase 3: *Identity Validation,* **TBD, if at all:**
Is the contacted individual responsible for the domain?

WHOIS ARS Utilizing a Cross-Functional Team

ICANN Team

- GDD OPERATIONS
- CONTRACTUAL COMPLIANCE
- REGISTRAR SERVICES
- LEGAL
- IT & PRODUCT MANAGEMENT

Vendor Team

- NORC
- WHIBSE
- DIGICERT
- UPU

Accuracy Reports
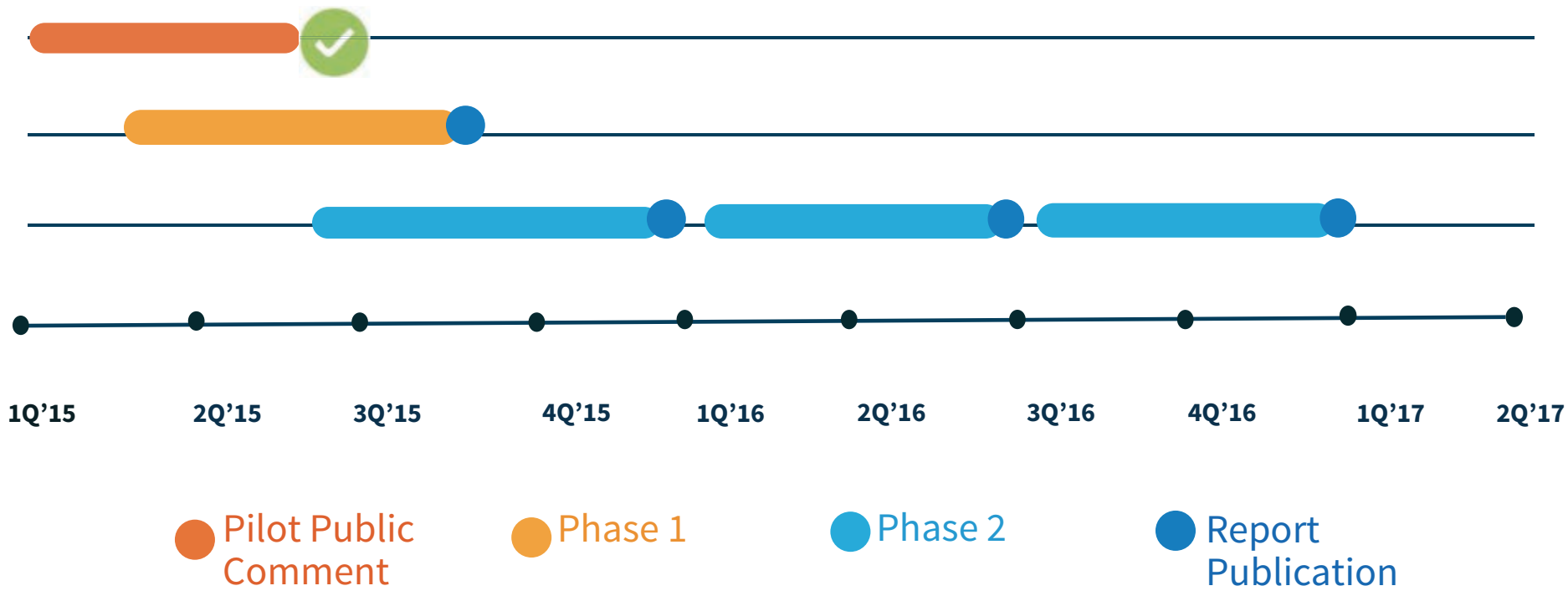
ARS Project Approach

Identify sample records

Collect WHOIS records for sample

Select subsample for accuracy testing

Perform accuracy testing

Analyze results & produce report
Compliance follow up with registrars

Roadmap for Phases 1 & 2

| 1Q'15 | 2Q'15 | 3Q'15 | 4Q'15 | 1Q'16 | 2Q'16 | 3Q'16 | 4Q'16 | 1Q'17 | 2Q'17 |

⬤ Pilot Public Comment   ⬤ Phase 1   ⬤ Phase 2   ⬤ Report Publication

- ◉ Pilot is complete
- ◉ Phase 1 – Syntax Report on track for publication in August 2015
- ◉ Phase 2 – Operational report, expected in December 2015
  - Followed by new Phase 2 reports each six months

WHOIS ARS Lessons Learned from the Pilot

Opportunities for Improvement from the Pilot

Pilot was successful as a proof of concept. Two major areas of learning:

Criteria

- Align to RAA
- Respect effective date
- Registrant, Tech & Admin contacts

Reporting

- Statistical significance
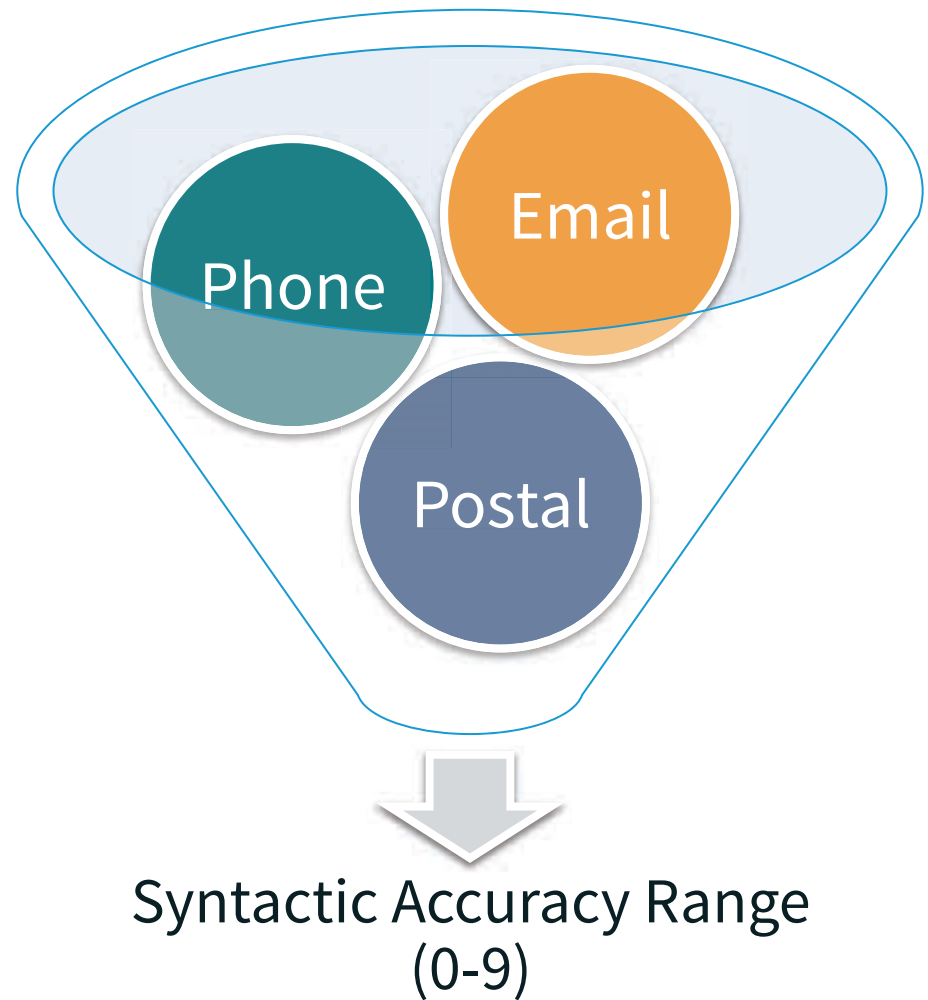- Reasons for inaccuracy
- Actionable data

WHOIS ARS Phase 1 Syntactic Accuracy

ICANN

Registrar Accreditation Agreement Requirements

⊙ Criteria posted to Knowledge Center on: whois.icann.org

Phone

Email

Postal

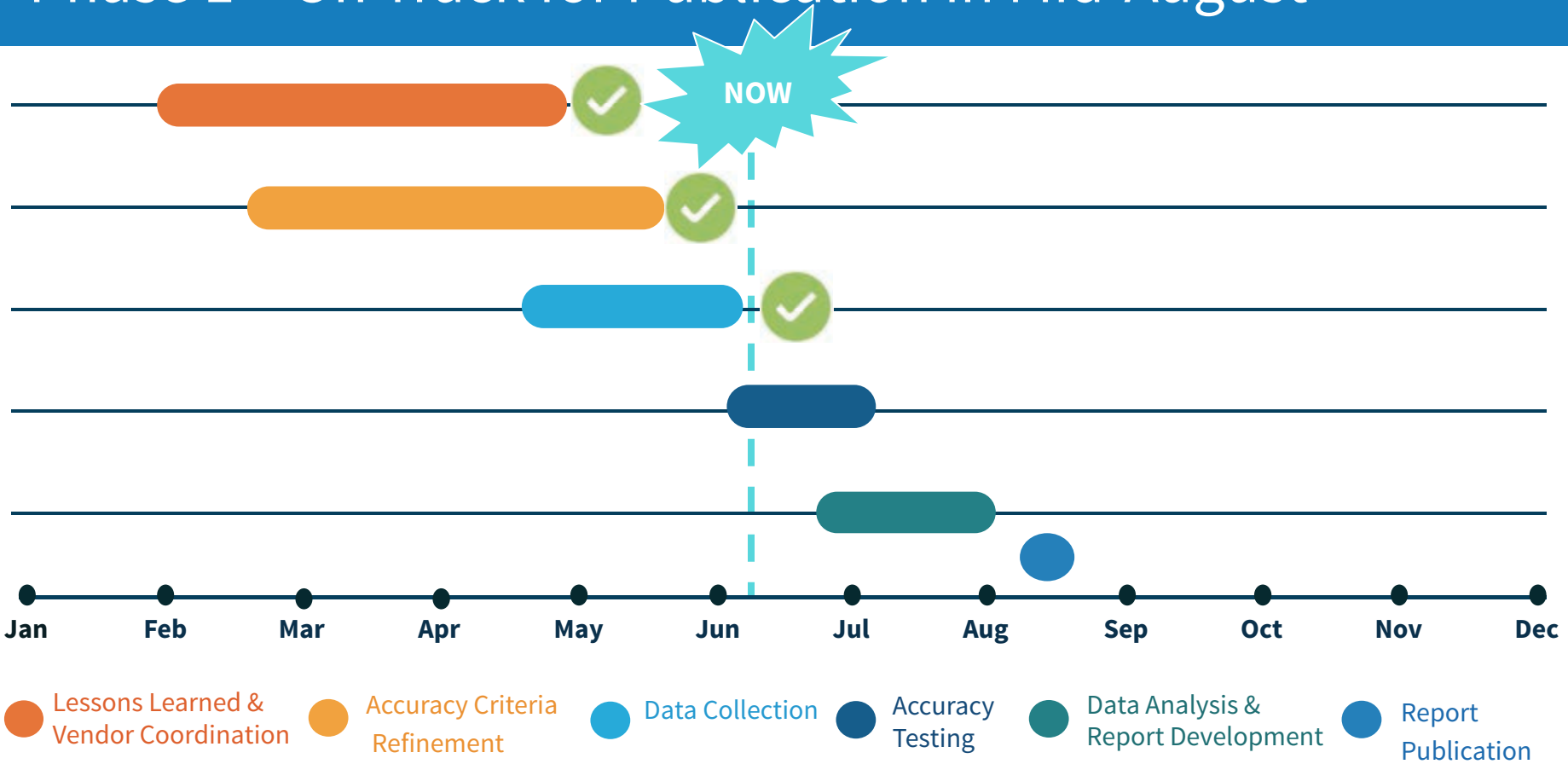Syntactic Accuracy Range (0-9)

ARS Phase 1 Report Expectations

Accuracy Statistics by Segment

⊙ 95% confidence intervals, ≤+/- 5% margin of error

⊙ Reporting syntactic accuracy for the following segments:

- The gTLD space, by region and in total
- New gTLDs compared to prior (legacy) gTLDs
- 2013 RAA records compared to 2009 RAA records

⊙ Compliance will be provided report of all inaccurate records for registrar follow up

Summary Report will Focus on *Why* Records are Inaccurate

⊙ Understanding the errors can enable:

- Registrar improvements
- Registrant updates / corrections
- Community to consider improvement initiatives based on data

Phase 1 – On Track for Publication in Mid-August

NOW

| Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |

- Lessons Learned & Vendor Coordination
- Accuracy Criteria Refinement
- Data Collection
- Accuracy Testing
- Data Analysis & Report Development
- Report Publication

- ⊙ Phase 1 Criteria published to: Knowledge Center on whois.icann.org
- ⊙ Accuracy Testing of 10k records underway, expected completion in early July 2015
- ⊙ Planning a webinar in August 2015 after publication to explain results

WHOIS ARS Phase 1 Demographics

At Time of Sample

Records in gTLDs	Prior TLDs	New gTLDs	2013 RAA Registrar
157M	96.85%	3.15%	+95%*

100k Sample

AFR	LAC	EUR	APAC	N.A.	2009 RAA	GF 2013 RAA	2013 RAA	New gTLDs	Prior gTLDs
.07%	3%	23%	24%	49%	3%	51%	46%	25%	75%

10k Sub-sample

AFR	LAC	EUR	APAC	N.A.	2009 RAA	GF 2013 RAA	2013 RAA	New gTLDs	Prior gTLDs
7%	18%	19%	21%	35%	18%	44%	38%	20%	80%

* Majority of these are "grandfathered" 2013 RAA records, record created prior to effective date of 2013 RAA

WHOIS ARS Phase 2
Operational Accuracy

WHOIS ARS Phase 2 – Operational Accuracy

Phase 2 = Syntax + Operability

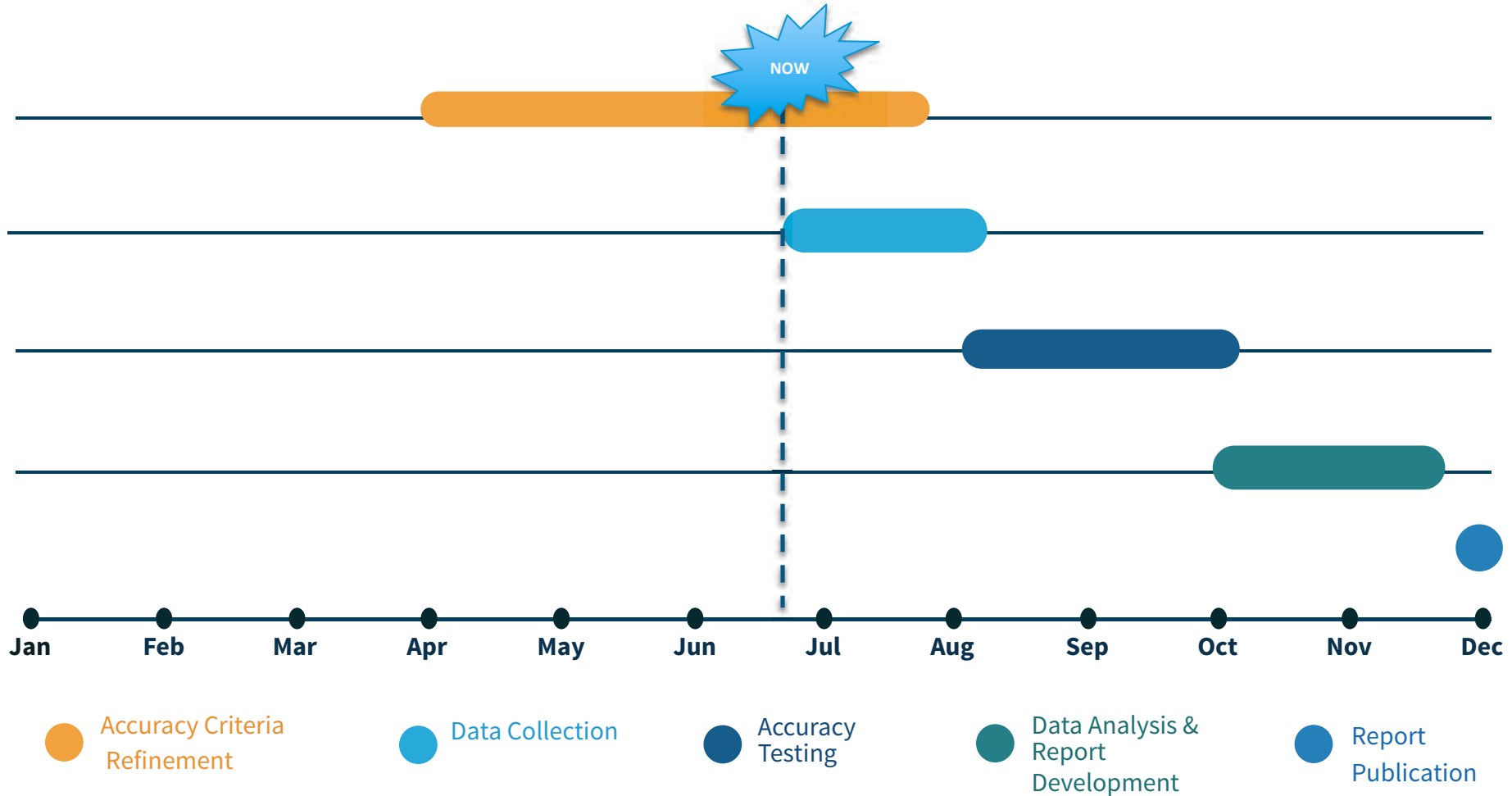*Examples of operability tests:*

- *Email*: Does the email go through / not bounced back?
- *Phone*: Does the number ring when dialed?
- *Postal*: Is the address deliverable?

Phase 2 Criteria Aligned to RAA Obligations

- Contact information in the WHOIS must be accurate
- Working standard is "used for intended purpose, i.e. contactable"
- Lessons learned from Phase 1 will be incorporated & criteria updated for Phase 2

WHOIS ARS Phase 2 Implementation Plan

NOW

| Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |

- Accuracy Criteria Refinement
- Data Collection
- Accuracy Testing
- Data Analysis & Report Development
- Report Publication

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WHOIS ARS and Compliance

WHOIS ARS Compliance Pilot

Goal of Compliance Pilot:
- Test the proof of concept: Use WHOIS ARS data to generate and forward WHOIS inaccuracy and WHOIS format complaints to registrars.

Summary of Events from January – April 2015:
- Telephone and email inaccuracy reports sent to contractual compliance
- Conducted initial review and validation of the data and collaboration with the WHOIS ARS ICANN and vendors.
- Uploaded the data into the complaint processing system.
- Began processing complaints.
- Stopped processing to address data issues based on registrar feedback.
- Resumed complaint processing.
- Closed complaints in system if data was incomplete or did not meet the contractual criteria.

WHOIS ARS Compliance Pilot

Overview

◉ **Complaint volume and outcome**
- 10,510 complaints tickets created
- 71 tickets sent to registrars
- 10,439 closed before sending to Registrars (see below)

◉ **Top Closure Resolve Codes:**
- Incomplete (9941)
- Domain not registered (337)
- Domain suspended or canceled (208)
- Complaint inconsistent with current WHOIS (12)
- Data changed (9)
- Registrar verified correct (8)

Note: some complaints are closed with multiple closure codes; total will not equal to 10,510

WHOIS ARS Compliance Pilot (continued)

Lessons Learned

◉ Inaccuracy criteria used for the sampling was not aligned with RAA/ICANN process:

- Cross-team collaborated to align on test criteria.
- WHOIS ARS Phase 1 Validation Criteria published at: http://WHOIS.icann.org/sites/default/files/files/WHOIS-ars-phase-1-validation-criteria-01jun15-en.pdf
- Ensure future WHOIS ARS reports are complete.

◉ Large complaint ticket influx burdened the complaint processing system.

◉ Separate data files from vendors caused inefficiency and duplication.

- Request to consolidate the reports and where appropriate all identified inaccuracies for a domain are placed in one record.

WHOIS Accuracy Reporting System

Enforcing Contractual Obligations

- Registrars must investigate and correct inaccurate WHOIS data per:
  - Section 3.7.8 of 2009 and 2013 RAA and
  - WHOIS Accuracy Program Specification of 2013 RAA.

- Registrars under 2013 RAA must use WHOIS format and layout required by Registration Data Directory Service (WHOIS) Specification.

- WHOIS inaccuracy and WHOIS format complaints created from WHOIS ARS data will follow the Contractual Compliance Approach and Process as published at: https://www.icann.org/resources/pages/approach-processes-2012-02-25-en.

- Failure to respond or demonstrate compliance during complaint processing will result in a Notice of Breach (and publication of notice on icann.org).

- ICANN will continue to give priority to complaints submitted by community members.

Community Input Processes

Registrar Advisory Panel Topics

- Accuracy criteria (which were also published)
- Method/mechanism for delivering inaccurate WHOIS records to registrars
- Method/mechanism for registrar reporting to ICANN Compliance on actions taken

Public Comment

- Outcomes / metrics
- Compliance enforcement process and results
- General feedback
- Could lead to formation of advisory group, depending on issue complexity or contentiousness.

Summary

1	Phased approach to ARS implementation.	**2**	Phase 1 – Syntax on track for report in August 2015.
3	Phase 2 – Operational Kicking off in Q2 2015. Report in December 2015.	**4**	Compliance to follow up with Registrars.

Questions?