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## Section 1                      Mobile Device Measurements - Bounce (BON)

### 1.1 Bounce (BON)

#### 1.1.1 General Description and Title

Total Bounce (BONT) measures the percentage of active population in-warranty devices that have been repaired and/or refurbished and returned to the SERVICE PROVIDER within 90 days of shipment from MANUFACTURER repair operations.

Confirmed Bounce (BONC) measures the percentage of active population in-warranty devices that have been repaired, returned to the SERVICE PROVIDER and confirmed defective within 90 days of shipment from MANUFACTURER repair operations.

#### 1.1.2 Purpose

These measurements are largely focused on North America and post-paid products. For global and pre-paid products, these measurements can be modified.

Total Bounce is a measure of the repaired and/or refurbished devices that came back under warranty after being tested and/or repaired. This applies to the post-buyer's remorse warranty returns.

Confirmed Bounce is a measure of the repaired and/or refurbished devices that came back under warranty and are determined to be defective. Confirmed Bounce units may or may not have failed on the previous return cycle. This applies to the post buyer's remorse warranty return.

#### 1.1.3 Applicable Product Categories

In general, these measurements apply to:

##### Mobile Devices

PC Code	Category Name	Definition
6.2.1.2.1	Feature Phone	A mobile phone that provides basic voice and text functions and may provide other features.
6.2.1.2.2	Smart Phone	A smartphone, or smart phone, is a mobile phone built on a mobile operating system, with more advanced computing capabilities than a feature phone.

#### 1.1.4 Detailed Descriptions

##### 1) Terminology

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- a) Returned Unit is a device that has been returned by the WIRELESS SUBSCRIBER for a warranty defect claim after the BRE period.
  - b) Repaired Unit is a returned device that has been tested, failed and repaired. The device is returned to like-new standards after the BRE period.
  - c) Refurbished Unit is a returned device that has been tested, passed and returned to like-new standards after the BRE period
  - d) Test Failure is defined as failure to meet SERVICE PROVIDER and MANUFACTURER guidelines.
  - e) WIRELESS SUBSCRIBER, the end user of the mobile device
  - f) SERVICE PROVIDER, the organization that sells the mobile services to the end-user
  - g) MANUFACTURER, the organization that provides the mobile device to the SERVICE PROVIDER.
- 2) MANUFACTURER Responsibilities
    - a) Provide best effort that normalization values are accurate and representative of the returned in-warranty population
  - 3) Counting Rules
    - a) Returns provided to the MANUFACTURER shall be counted in the month they are returned
    - b) MANUFACTURER will use the receipt date for date of return
    - c) MANUFACTURER repair operation ship date starts the 90 day bounce period
    - d) A device is counted if the same serial numbered device is returned to repair within 90 days of the previous repair ship date.
    - e) Returned units shall only be counted if they are returned more than once under warranty
    - f) Bounce data submission shall only include data for device models after market-launch
  - 4) Counting Rule Exclusions
    - a) Units returned because of obvious shipping damage or WIRELESS SUBSCRIBER abuse are not counted.
    - b) Units returned under insurance claims are not included
    - c) Units are not counted if the sales model is older than 18 months from date of initial launch
  - 5) Calculations and Formulas
    - a) BON measurements are reported monthly with data submitted 7 weeks following the end of the month
    - b) Formula for normalized BON is for repairs or refurbished and bounce units for the calendar month:

Total Bounce = Number of Repaired or Refurbished Devices Returned / Total Number of Repaired or Refurbished Devices Shipped

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Confirmed Bounce = Number of Repaired or Refurbished Devices Returned and confirmed defective / Total Number of Repaired or Refurbished Devices Shipped

**Table 1.1-1 BON Notation**

Identifier	Definition
BONs	Number of Repaired or Refurbished Devices Returned in 90 Days
BONv	Number of Repaired or Refurbished Devices Returned in 90 Days <b>and confirmed defective</b>
BONw	Total Number of Repaired or Refurbished Devices Shipped

**Table 1.1-2 BON Measurement Identifiers and Formulas**

Identifier	Title	Formula	
BONT	Total Bounce 90-Day	$(\text{BONs} / \text{BONw}) \times 100$	%
BONC	Confirmed Bounce 90-Day	$(\text{BONv} / \text{BONw}) \times 100$	%

- 1) Reported Data and Format, the organization shall
  - a) Submit data on measurements that are within the scope of this document
  - b) Correct any data discrepancies, and resubmit corrected data for any erroneous data submitted
  - c) The BON measurements shall be reported for each month (refer to Counting Rules) and each product category with data elements, or equivalent as defined in Table 1.1-1.

#### 1.1.5 Sources of Data

Repaired devices confirmed defective devices, and total number of repaired units shipped. Data are provided by the MANUFACTURER.

#### 1.1.6 Ranges and Floors

- a) No ranges established
- b) No floors established

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**1.1.7 Examples**

Examples for applying the Bounce measurement. Confirmed Bounce are those of which failed testing of the Total Bounce returns making Confirmed Bounce a subset of Total Bounce.

**Total Bounce**

Month Since Launch	#BONT	# of device Repaired or Refurbished Devices Returned in 90 days	Calendar Month	% of Bounce units
1	35	6000	January	0.58%
2	38	6300	February	0.60%
3	40	7200	March	0.56%
4	44	7500	April	0.59%
5	46	8300	May	0.55%
6	48	8800	June	0.55%
7	50	9600	July	0.52%
8	48	10200	August	0.47%
9	46	9800	September	0.47%
10	39	8200	October	0.48%
11	36	8000	November	0.45%
12	32	7800	December	0.41%

**Confirmed Bounce**

Month Since Launch	#BONC	# of device Repaired or Refurbished Devices Returned in 90 days	Calendar Month	% of Bounce units
1	3	6000	January	0.05%
2	5	6300	February	0.08%
3	6	7200	March	0.08%
4	6	7500	April	0.08%
5	5	8300	May	0.06%
6	6	8800	June	0.07%
7	7	9600	July	0.10%
8	4	10200	August	0.04%
9	5	9800	September	0.05%
10	4	8200	October	0.05%
11	3	8000	November	0.04%
12	3	7800	December	4.10%

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