The Great Call Blocking Notification Code Debate: 608 vs. 603+

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But isn't system development and testing needed before implementing 607 & 608 too?
Why 603+ Versus 608?

- 603 already exists in deployments, 608 does not
- 603 currently passes transparently thru SBCs, so no development required for E-to-E signaling
- 603+ requires minimal incremental development required in “Analytic Engines” and Enterprises
- In addition to the above, 608 will require development to transverse B3UAs
- 603+ has a unique reason phrase in the status line, you do not have to read a header to distinguish 603 from 603+
- 603+ does not require Encrypted Jcard
- Availability sooner than 608
How to Identify a 603+ Versus 603

- The 603+ standard, ATIS-1000099, defines a profile of the SIP 603 response code defined in RFC 3261, SIP: Session Initiation Protocol [Ref 1], herein referred to as “603+”. A SIP 603+ response is differentiated from a SIP 603 response in that:
  - 1. Its status line uses a unique reason phrase, “Network Blocked”, rather than the SIP 603 default Reason Phrase “Decline” specified in RFC 3261.
  - 2. In addition, it contains a SIP Reason header defined in RFC 3326, The Reason Header Field for the Session Initiation Protocol (SIP), encoded per the 603+ standard, ATIS-1000099 contains the redress information.
Analytics-based Network Blocking

- When a service provider blocks a call due to analytics, the service provider shall reply with a SIP 603+ response

- A SIP 603+ response contains the following format:
  - with a status line value of 603 - “Network Blocked”,
  - with a Reason header containing:
    - The reason for the blocking, a version of this specification, “analytics1”;
    - The contact information of the entity responsible for blocking the call. The contact information provides the calling party with information on where to go to find out why the call was blocked, and to potentially seek redress;
    - And location information of where the blocking occurred
Examples of Reason Header Syntax for 603+ Response

- Reason: Q.850; cause=21;
  text="v=analytics1;tel=+12155551212";location=RLN

- Reason: SIP; cause=603;
  text="v=analytics1;tel=+12155551212";location=RLN

- Reason: Q.850; cause=21;
  text="v=analytics1;url=https://example.com";location=LN

- Reason: SIP; cause=603;
  text="v=analytics1;url=https://example.com";location=LN
Transit Network Processing

- A transit network shall transparently forward a received SIP 603+ response towards the calling party. It shall not change the response code from 603 to a different value, nor modify any part of the 603+ response other than headers used to forward it (e.g., Via headers) except as required by its interconnect agreements or other contractual arrangements with the downstream network. It shall not retry the associated request.

- Analytics processing in a transit network may result in the generation of a 603+ response.
An originating network receiving a SIP 603+ response shall forward the SIP 603+ response towards the SIP User Agent (UA) that originated the call request. It shall not modify the 603 response, except as required by contractual agreements with the entity responsible for the originating SIP UA or the network (e.g., Enterprise) that must be traversed to reach the originating SIP UA.