DICOM Correction Proposal

STATUS	New
Date of Last Update	2017/01 /20
Person Assigned	
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Correction Number CP-	
Log Summary: Fix error with QIDO results calculation.	
Name of Standard PS3.18 Section 6.7.1.2	
Rationale for Correction: Gunter Zollinger has pointed out that the calculation of remaining below is incorrect. In particular, if $M >$ smax and limit $>$ smax , remaining becomes to: $M -$ smax, independent of offset! Is this really intended?! I rather think, smax - offset should be replaced by just smax in the instruction how to calculated the number of returned matches.	
Correction Wording: <include proposed change below, following guidelines for formatting of changes in supplements>	

> *Update PS3.18 Section 6.7.1.2 as follows:*
>
> *Editors note: this just change smax – offset in the calculation of R into just smax.*

6.7.1.2 Response

The origin server shall perform the query indicated in the request.

The search requests shall be idempotent, that is, two separate search requests with the same target resource, query parameters, and header fields shall return the same ordered list of results, if the set of matching results on the origin server has not changed.

The results returned in the response are determined as follows:

M   is the number of matches resulting from the search.

smax   is the maximum number of results the origin server allows in a single response.

offset   is the value of the "offset" query parameter. It is the index of the first element in results.

R   is the length of the returned results. It is equal to the minimum of:

> **M-offset**   the length of available matches starting at offset,
>
> **smax ~~offset~~**   the length before reaching smax, and
>
> **limit**   the value of the "limit" query parameter.

remaining   is the number of remaining matches. It is equal to: M-(offset+R).

The response is determined as follows:

   If (R<=0) then there were no matches, and a 204 (No Content) response shall be returned with an empty payload.

Otherwise, a 200 (OK) response shall be returned with a payload containing results

If (remaining > 0) the response shall include a Warning header field (see [RFC7234] Section 5.5) containing the following:

```
Warning: 299 {+service}: There are <remaining> additional results that can be
requested
```

Replace the first part of PS3.18 Section 6.7.1.2 with the following:

Editor's note: it might be clearer to modify the whole section as follows

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6.7.1.2.X Results

Given the following definitions:

server-max	the maximum number of results the origin server allows in a single response.
offset	the value of the "offset" query parameter.
limit	the value of the "limit" query parameter.
matches	the number of matches resulting from the search.
candidates	the number of matches that are candidates for result. It is equal to: matches – offset.
results	The number of results returned in the response.
remaining	the number of candidate matches that were not returned. It is equal to: candidates – results

The results returned in the response are determined as follows:

- If (results <= 0) then there are no results, and a 204 (No Content) response shall be returned with an empty payload.

- Otherwise, a 200 (OK) response shall be returned with a payload containing results matches.

- If (remaining > 0) the response shall include a Warning header field (see [RFC7234] Section 5.5) containing the following:

    Warning: 299 {+service}: There are <remaining> additional results that can be requested