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Sophia Antipolis, 98.10.20 – 98.10.23

Question: 9 (MSC)

SOURCE:    RAPPORTEUR

TITLE:       AFTER “**after**”

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### Summary

At the ITU meeting in Berlin there were some changes approved to align the textual grammar with the one in Annex B. One of the changes was not correct (Annex B should be corrected in the same manner).

### Proposed correction

The changes below refer to change 7-AB in B909 “LALR (1) grammar aligned with Annex B”

**before** and **after** should have <order dest lists> in the <orderable event>  
on gates **before** should have <order dest> and **after** <order dest list>

Suppose we have a specification:

```
msc m;  
  gate g1;  
  a : instance;  
    action 'x:=1' before g1;  
    endinstance;  
  b : instance;  
    action 'x:=2' before g1;  
    endinstance;  
endmsc m;
```

If we rewrite it using 'after' keyword (as required in the Annex B) we obtain

```
msc m;  
  gate g1 after l1, l2;  
    ^^^^^^^^^^^^ two elements in the list
```

```

a : instance;
  label l1; action 'x:=1' before g1;
endinstance;
b : instance;
  label l2; action 'x:=2' before g1;
endinstance;
endmsc m;

```

Note, that Z.120 without the 'after' keyword is consistent, but adding the 'after' keyword requires <order dest list> in <order gate>'s. New changes are marked with “green” .

Change: Use of keyword <b>label</b> , (5-GC), Name consistency (6-GC), Rule rearrangement (<end> moved closer to terminal nodes) keyword <b>after</b> , (7-AB)
<pre> &lt;orderable event&gt; ::=     [ &lt;event name&gt; ]     { &lt;message event&gt;   &lt;incomplete message event&gt;   &lt;create&gt;   &lt;timer statement&gt;   &lt;action&gt; }     [ <b>before</b> &lt;event name list&gt; ] </pre>
<pre> &lt;orderable event&gt; ::=     [ <b>label</b> &lt;event name&gt; ; ]     { &lt;message event&gt;   &lt;incomplete message event&gt;   &lt;create&gt;   &lt;timer statement&gt;   &lt;action&gt; }     [ <b>before</b> &lt;order dest list&gt; ] [ <b>after</b> &lt;order dest list&gt; ] &lt;end&gt; </pre>

#### 4.4 Environment and Gates

Change: Use of keyword <b>after</b> , (7-AB)
<pre> &lt;actual order in gate&gt; ::=     &lt;gate name&gt; </pre>
<pre> &lt;actual order in gate&gt; ::=     &lt;gate name&gt;     [ <b>after</b> &lt;order dest list&gt; ] </pre>

Change: Use of keyword <b>after</b> , (7-AB)
<pre> &lt;def order out gate&gt; ::=     &lt;gate name&gt; </pre>
<pre> &lt;def order out gate&gt; ::=     &lt;gate name&gt;     [ <b>after</b> &lt;order dest list&gt; ] </pre>

Change: Use of keyword <b>after</b> , (7-AB)
<pre> &lt;inline order out gate&gt; ::= </pre>

```
<gate name>  
[ external before <order dest> ]  
<inline order in gate> ::=  
  <gate name> before <order dest>  
  [ external ]
```

```
<inline order out gate> ::=  
  <gate name>  
  [ [ after <order dest list> ] external before <order dest> ]  
<inline order in gate> ::=  
  <gate name> before <order dest>  
  [ external [ after <order dest list> ] ]
```