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Sophia Antipolis, 98.10.20 – 98.10.23

Question: 9 (MSC)

SOURCE: RAPPORTEUR

TITLE: MSC'92 BACKWARD COMPATIBILITY

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### Summary

This proposal has two purposes, to disallow the mixture of “MSC'92” and “MSC'96 instance/event oriented syntax and to make the “MSC'92” part of the language compliant with MSC'92.

### Proposal

At the meeting in Berlin the change 3-GC in B909 (LALR (1) Grammar aligned with Annex B) was unfortunately explained as “Distinguish instance and event oriented grammar”. This explanation was unfortunate since the proposal disallows the mixture of “MSC'92” and “MSC'96 instance/event oriented syntax” and not, as the name indicated, prohibited the mixture of instance and event oriented MSC'96”. Unfortunately the non-terminals were named in a fashion that added to the confusion.

The first part of this proposal restates the original proposal, but changes the names of the non-terminals.

The second part of this proposal corrects some errors in the “MSC'92” part of the grammar.

### Distinguish “MSC'92” and MSC'96

This is the original proposal except that some non-terminals marked in “green” have change name to better reflect their purpose. The following table shows what have been renamed.

Old name (in B909)	New name
<instance oriented msc>	<old msc>
<event oriented msc>	<new msc>
<instance oriented statement>	<old statement>
<event oriented statement>	<new statement>

**Change: Distinguish "MSC'92" and MSC'96 grammar, (3-GC):**

<msc body> ::=

<msc statement>\*

<msc statement> ::=

<text definition> | <event definition> | <old instance head statement> <instance event list>

<msc body> ::=

<old msc> | <new msc>

**Add: Distinguish "MSC'92" and MSC'96 grammar, (3-GC):**

<old msc> ::=

<old statement> \*

<new msc> ::=

<new statement> \*

<old statement> ::=

<text definition> | <condition> | <old instance head statement> <old instance event list>

<new statement> ::=

<text definition> | <event definition>

<old instance event list> ::=

<old instance event> +

<old instance event> ::=

<orderable event> | <old non-orderable event>

**Add: Distinguish "MSC'92" and MSC'96 grammar, (3-GC):**

<old non-orderable event> ::=

<coregion> | <shared condition> | <shared msc reference> | <shared inline expr> |  
<instance end statement> | <stop>

## MSC'92 backward compatibility correction

- In MSC'92 msc documents end with the keyword **endmscdocument** (MSC92-1)
- The current grammar requires a **shared** keyword after a condition (MSC92-2)

In MSC'92 the following example is correct:

```
msc m;  
  instance i;  
    condition c; /* no shared keyword */  
  endinstance;  
endmsc;
```

To correct this situation the following changes are proposed:

<b>Change (MSC92-1):</b> Support keyword: <b>endmscdocument</b> :	
<msc document> ::=	<msc document head> <msc document body>
<msc document> ::=	<msc document head> <msc document body> <b>endmscdocument &lt;end&gt;</b>

<b>Add (MSC92-2):</b> Do not require <b>shared</b> keyword in msc'92 conditions.	
<old condition> ::=	<condition identification> [ <shared> >] <end>

<b>Change (MSC92-2):</b> Do not require <b>shared</b> keyword in msc'92 conditions	
<old non-orderable event> ::=	<coregion>   <shared condition>   <shared msc reference>   <shared inline expr>   <instance end statement>   <stop>
<old non-orderable event> ::=	<coregion>   <old condition>   <shared condition>   <shared msc reference>   <shared inline e>   <instance end statement>   <stop>