Review to the Article Proof

Article Number:	15-TIE-3480
Article Title:	Formal Modeling and Verification of a Rate-Monotonic Scheduling Implementation with Real-Time Maude
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The places, which need to be corrected, are highlighted in the file `annotated_proof.pdf`. Here we list all the corrections corresponding to the highlighted places in `annotated_proof.pdf`. The file `example.pdf` is typeset by the authors, and it may be useful for the corrections. (The corresponding places are also highlighted.)

Here are the detailed list of corrections:

- Page 2, right-hand side:
  "`(mc` s `|=u` Φ`.)`"
  $\rightarrow$
  "`(mc` s `|=u` Φ `.)`"
  Please note that "Φ" should be followed by a space.

- Page 5, left-hand side: it should be

```
      = if ST == RUNNING
        then < O : PTask
               | status : INTERRUPT >
        else < O : PTask |> fi
      [otherwise] .
```

  Please make sure that:
  – "`if`" at 1st line, "`then`" at 2nd line, and "`else`" at 4th line are aligned with each other;
  – "`|`" at 3rd line is aligned with "`O`" at 2nd line;
  – "`[otherwise]`" at 5th line is aligned with "=" at 1st line.

- Page 5, left-hand side: "`) .startScheduling`" $\rightarrow$ "`).startScheduling`"
  Please note that there should be no space before the dot "`.`".

- Page 6, left-hand side, the upper one: it should be

```
      = (deltaTask(ID, L, R)
         T STS HW (deltaIS(ISRC, R)))
      if ID := (HW).getPc
         /\ ID :: MaybeNat .
```

  Please make sure that:
  – "`deltaTask`" at 1st line is aligned with "`T`" at 2nd line;
  – "=" at 1st line is aligned with "`if`" at 3rd line;
  – "`/\`" at 4th line is aligned with "`ID`" at 3rd line.

- Page 6, left-hand side, the lower one: it should be

```
      = minimum(mteTask(ID, L),
```

```
                mteIS(ISRC), mteIr(HW))
      if ID := (HW).getPc
         /\ ID :: MaybeNat .
```

Please make sure that:
– "`mteTask`" at 1st line is aligned with "`mteIS`" at 2nd line;
– "=" at 1st line is aligned with "`if`" at 3rd line;
– "`/\`" at 4th line is aligned with "`ID`" at 3rd line;
Please pay attention to the space between "`/\`" and "`ID`" at 4th line.

- Page 6, right-hand side:
"`op taskTimeout :->Prop [ctor] .`"
→
"`op taskTimeout : -> Prop [ctor] .`"
Please note that there should be spaces before and after "`->`".

- Page 6, right-hand side:
"`op correct :->Prop [ctor] .`"
→
"`op correct : -> Prop [ctor] .`"
Please note that there should be spaces before and after "`->`".

- Page 6, right-hand side:
"`shouldRun (ID, L)`"
→
"`shouldRun(ID, L)`"
Please note that there should be no space before "`(`".

- Page 6, right-hand side:
"`([]correct)\/(correct U task-Timeout)`"
→
"`([]correct)\/(correct U taskTimeout)`".
Please do not break "`taskTimeout`" into two lines.
If necessary, this formula can be broken (into two lines) before or after "`\/`" and/or "`U`". But please do not break it into two lines at other places.

- Page 9, left-hand side: "v`monus`r" → "v `monus` r"
Please note that there should be spaces before and after "`monus`".

- Page 9, right-hand side:
"`delta-Task(`ID`,`L`,`$r + r'$`)`"
→
"`deltaTask(`ID`,`L`,`$r + r'$`)`".
Please do not break "`deltaTask`" into two lines. If necessary, please break before or after "`deltaTask`".

- Page 10, left-hand side: "$\simeq_{\mathtt{P}}$" → "$\simeq_P$"
Please note that the subscript "P" should be in math mode.