In Clause 10.2.4 (Simulink modeling, signal flow), third paragraph, last sentence, replace ‘used, signal flow’ and ‘used, physical interaction’ with ‘included’ (two occurrences).

In Clause 10.7 (Connectors)

Clause 10.7 (Connectors)

Clause 10.7.1 (Purpose)

Remove the first sentence.

Second sentence (in beta 1), remove ‘ through their connection points’.

Clause 10.7.2 (SysML modeling)

First paragraph, second sentence, replace ‘generalized by it’ with ‘it generalizes’.

Second paragraph

Second sentence

After ‘has’, insert ‘ a block *Example* with’.

Pluralize ‘type’.

At end, insert ‘*A* and *SpringB*, respectively, defined similarly to *Spring* in Figure 11, Subclause 10.6.7’.

Third sentence

Pluralize ‘block’.

After ‘*Spring*’, insert ‘*A and SpringB*’.

In ‘has’, replace ‘s’ with ‘ve’.

Figure 12 (Connectors in SysML), after ‘s1:Spring’, insert ‘A’, and after ‘s1:Spring’, insert ‘B’. The result should look like



Clause 10.7.3 (Modelica modeling)

Second paragraph

Second sentence

Replace ‘*Model*’ with ‘*Example*’.

Remove the comma.

Pluralize ‘type’.

At end, insert ‘*A* and *SpringB*, respectively’.

Third sentence

Before ‘*Spring*’, insert ‘The models ’.

After ‘*Spring*’, insert ‘*A and SpringB*’.

Replace ‘is a model with’ with ‘have’, and ‘ (see’ with ‘, defined similarly to *Spring* in’).

Remove ‘ for a definition)’.

Fourth sentence, remove ‘the ’ (two occurrences).

Code box

Replace ‘Model’ (capitalized) with ‘Example’ (two occurrences).

In ‘Spring s1’, after ‘Spring’, insert ‘A’.

In ‘Spring s2’ after ‘Spring’, insert ‘B’.

Remove the lines beginning with the blank one above ‘model Spring’.

Clauses 10.7.4 through 10.7.6

Second paragraphs, second sentences, after ‘has’ insert ‘ a subsystem block *Example* with’ (three occurrences).

Code boxes (three occurrences)

Indent all lines by four spaces, except for the four lines beginning with ‘Converter’ in Clause 10.7.6.

Increment by 1 the number appearing after ‘SID="’ (two occurrences each in Clauses 10.7.4 and 10.7.5, and five occurrences in Clause 10.7.6).

At the beginning, insert

‘<Block BlockType="SubSystem" Name="Example" SID="1">

<P Name="Ports">[0,0]</P>

<System>

’

At the end, insert:

‘

</System>

</Block>’

Clause 10.7.4 (Simulink modeling, signal flow)

Title, replace ‘**signal flow**’ with ‘**between blocks with no constraints**’.

First paragraph

Remove the first sentence.

Second sentence (in beta 1)

Replace ‘Connections between Simulink inports and Simulink outports are represented by regular’ with ‘SysML connectors correspond to’.

At end, insert ‘ when’, replace the period with a colon, then

Insert a bullet symbol on a new line followed by ‘Simscape is not used with Simulink.’

Insert another bullet symbol on a new line followed by ‘Simscape is used with Simulink and the SysML connectors are owned by a block with no constraints involving PhSVariables and that link ports on blocks with no constraints involving PhSVariables, such as those in Subclause 11.3, SysML connectors correspond to Simulink lines (see Subclauses 10.7.5 and 10.7.6 for other cases when Simscape is used with Simulink).’.

Third sentence (in beta 1), starting a new paragraph after the bullets above, replace ‘have a direction, which must be consistent with the kind of Simulink ports being connected (inports or outports)’ with ‘are directed from outports to inports’.

Remove the last sentence (in beta 1).

Second paragraph

First sentence, at the end, insert ‘, assuming *SpringA* and *SpringB* do not have constraints involving PhSVariables’.

Second sentence

Remove ‘, each ’.

In ‘referencing’, replace ‘enc’ with ‘r’.

Move ‘block ’ to before ‘*Spring*’, and pluralize it.

After ‘*Spring*’, insert ‘*A and SpringB*, respectively,’.

After ‘outport’, insert ‘ each ’.

Replace ‘ (see’ with ‘, defined similarly to *Spring* in’, and remove ‘)’.

Code box, after the first occurrence of ‘Spring’, insert ‘A’, and after the second occurrence, insert ‘B’.

Clause 10.7.5 (Simulink modeling, physical interaction)

Title, replace ‘**physical interaction**’ with ‘**between blocks with constraints**’.

First paragraph, replace ‘If two SysML blocks correspond to Simscape components, and the blocks are connected through bidirectional ports (have types with inout flow properties), SysML connectors’ with ‘When Simscape is used with Simulink, SysML connectors that are owned by a block with no constraints involving PhSVariables and that link ports on blocks with constraints involving PhSVariables (see Subclause 10.8)’.

Second paragraph

First sentence, at the end, insert ‘, assuming *SpringA* and *SpringB* have constraints involving PhSVariables’.

Second sentence

Pluralize ‘component’.

After ‘*Spring*’, insert ‘*A and SpringB*, respectively, defined similarly to *Spring* in Subclause 10.6.10’.

Third sentence

Replace ‘*Spring* has’ with ‘The springs have’.

After ‘(*p2*)’, insert ‘ each,’.

Code box

After the first five occurrences of ‘Spring’, insert ‘A’, and after the second five occurrences, insert ‘B’.

Remove the spaces before ‘</P>’ (four occurrences).

Clause 10.7.6 (Simulink modeling, physical interaction and signal flow)

Title, replace ‘**physical interaction and signal flow**’ with ‘**between blocks that have constraints and blocks that do not**’.

First paragraph

First and second sentences

Replace ‘physical interaction and signal flow are combined in Simulink, a signal flow might be defined between a port of a regular Simulink block and a port of a Simscape block. Since the connected ports are of different kind’ with ‘Simscape is used with Simulink, SysML connectors that are owned by a block with no constraints involving PhSVariables and that link ports of a block with constraints involving PhSVariables (see Subclause 10.8) to ports of other blocks without constraints involving PhSVariables, such as those in Subclause 11.3, or vice versa’.

After ‘additional block’ insert ‘ between them’.

Replace ‘that will’ with ‘to’.

At the end, add a new sentence ‘Specifically, a Simulink connection links a block with constraints (through ports) to or from the converter block, while a Simulink line connects the converter block to or from a block with no constraints.’

Second paragraph

First sentence

Replace ‘signal flow component’ with ‘Simulink block’ and ‘physical interaction’ with ‘Simscape’.

At end, insert ‘, assuming *SpringA* does not have constraints involving PhSVariables, while *SpringB* does.’

Second sentence

Replace ‘It’ with ‘The code’.

In ‘a Sim’, remove ‘a ’ (three occurrences).

After the first occurrence of ‘Simulink block *Spring*’, insert ‘*A* (defined similarly to Spring in Subclause 10.6.5)’.

After ‘Simscape component *Spring*’, insert ‘*B* (defined similarly to *Spring* in Subclause 10.6.10)’.

After the second occurrence of ‘Simulink block *Spring*’, insert ‘*A*’.

Code box

Remove blank lines (five occurrences).

Remove the spaces before ‘</P>’ (two occurrences).

After the first and last occurrences of ‘Spring’, insert ‘A’ (two occurrences), and after the remaining occurrences of ‘Spring’, insert ‘B’ (five occurrences).

Clause 10.7.7 (Simscape modeling)

First paragraph, first sentence

Before ‘SysML’ insert ‘When Simscape is used with Simulink, ’.

After ‘connectors’ insert ‘ owned by a block with constraints involving PhSVariables’.

Second paragraph, second sentence

After ‘has’, insert ‘ a block *Example* with’.

After ‘*Spring*’, insert ‘*A* and *SpringB*, defined similarly to *Spring* in Subclause 10.6.10’

Replace ‘with’ with ‘and’.

Code box

Replace ‘Model’ with ‘Example’.

After the first occurrence of ‘Spring’, insert ‘A’, and after the second occurrence, insert ‘B’.

Clause 10.7.8 (Summary), in the table

Remove the bottom row.

Second column, third row, replace ‘port’ by ‘component’.

Third column

First row, after ‘**Simulink**’, insert ‘ **(without Simscape)**’ on a separate line in the same cell.

Third row, replace the contents with ‘N/A’.

To the right of the third column, insert a new column, with contents by row top to bottom:

‘**Simulink (with Simscape)**’ with ‘**Simulink**’ on a separate line in the same cell.

‘Connection line between connectors’

‘Connection line between connectors’

In Clause 10.8 (Blocks with constraint properties and binding connectors), title, remove ‘ properties and binding connector’.