## 57SIG - Issue 550: Time-span for instances of I11 Situation

The SIG reviewed the proposed definition for property Jxx1 held at least for, whereby an instance of I11 Situation is connected to the instance of E52 Timespan over which it held over (HW by MD).

The details of the property definition can be found [below](#_Jxx1_held_at):

**Discussion points**:

* The difference btw E3 Condition State and I11 Situation is not particularly clear. And in that sense, it’s not 100% clear what the added value of the timespan of an I11 Situation offers.
* The SIG should explore and carefully define the relation between E3 Condition State and I11 Situation.
  + In principle, *Jxxx1 held at least for* seems to work well with E3 Condition state, which means that there could be implications for the hierarchical relations of I11 and E3.

**How to move forward**:

* Determine the constraints put on an instance of I4 Proposition Set (and/or I11 Situation) in the sense of defining the properties that can form part of the I4 instance. This should apply to subclasses of I4 (so if E3 is considered IsA I4, it would apply to it too).
* In determining the relation between I11 Situation and E3 Condition State, we must keep in mind that while it is the case that E3 IsA E2 Temporal Entity, it is **not** the case that I11 IsA E2 (I11 can be placed in the future).
* The relation of the modelling constructs around I11 Situation need to take into consideration S23 Position Determination and O31 has validity time-span as well.

**Decisions**:

* The SIG voted in favor of admitting the proposed property to CRMinf. Hence it will be part of CRMinf v. 1.1
* **HW**: The scope note needs editorial changes, SdS to implement them (in a new issue).
* Start a new issue where to explore the connection between I11 Situation, S23 Position Determination, and E3 Condition State.   
  **HW**: MD, WS.

### Jxx1 held at least for (is least validity of) –property definition:

**Jxx1 held at least for (is least validity of)**

Domain:

I11 Situation

Range:

E52 Time-Span

Superproperty of:

Quantification:

many to one, necessary (1,1:0,n)

Scope note:

This property associates an instance of I11 Situation with the instance of E52 Time-Span that defines the minimal time of asserted validity of the property instances constituting this situation. The associated time-span constitutes a necessary part of the identity of this situation. Any different association of a time-span even to the same constituting propositions of this situation will identify another instance of I11 Situation.

Note that the respective situation may have had shorter duration than the one given by the property *P82 at some time within* to the associated time-span, but the same propositions may quite well have prevailed for longer and other times. In order to make a statement about how long at least the propositions of that situation uninterruptedly prevailed, the property *P81 ongoing throughout* should be used for the associated time-span. There is no means to declare that the propositions of that situation did not occur again outside the given time-span.

There are two typical cases for the determination of the related instance of E52 Time-Span. In the first, it is the temporal extent of some instance of E2 Temporal Entity, such as an observation activity, and documented with *P4 has time-span (is time-span of)*: this then documents the validity of the asserted instance of I11 Situation for the complete duration of the instance of E2 Temporal Entity, even if the actual time-span is not known, and can be regarded as a phenomenal time-span. In the second, the instance of E52 Time-Span is a date range declared in or derived from historical sources or provided by dating methods: then it is a declarative timespan.

Examples:

In first-order logic: