### AP25 occurs during (includes)

Domain: [E2](#_E2_Temporal_Entity) Temporal Entity

Range: [E2](#_E2_Temporal_Entity) Temporal Entity

Subproperty of: [E2](#_E2_Temporal_Entity) Temporal Entity.[P185](#_P185_ends_before) ends before the end of (ends after the end of):[E2](#_E2_Temporal_Entity) Temporal Entity

Quantification: many to many (0,n:0,n)

Scope note: This property identifies the situation in which the entire temporal extent of an instance of E2 Temporal Entity is within the temporal extent of another instance of E2 Temporal Entity that starts before and ends after the included temporal entity.

This property is only necessary if the time span is unknown (otherwise the relationship can be calculated). This property is the same as the "during / includes" relationships of Allen’s temporal logic (Allen, 1983, pp. 832-843).

This property is transitive.

Example: Middle Saxon period (E4) *occurs during* Saxon period (E4)

In First Order Logic:

 AP25(x,y) ⊃ E2(x)

 AP25(x,y) ⊃ E2(y)

AP25(x,y) ⊃ P185(x,y)

### AP26 overlaps in time with (is overlapped in time by)

Domain: [E2](#_E2_Temporal_Entity) Temporal Entity

Range: [E2](#_E2_Temporal_Entity) Temporal Entity

Subproperty of: [E2](#_E2_Temporal_Entity) Temporal Entity.[P176](#_P176_starts_before) starts before the start of (starts after the start of): [E2](#_E2_Temporal_Entity)Temporal Entity

[E2](#_E2_Temporal_Entity) Temporal Entity.[P185](#_P185_ends_before) ends before the end of (ends after the end of):[E2](#_E2_Temporal_Entity) Temporal Entity

Quantification: many to many (0,n:0,n)

Scope note: This property identifies a situation in which there is an overlap between the temporal extents of two instances of E2 Temporal Entity.

It implies a temporal order between the two entities: if A overlaps in time B, then A must start before B, and B must end after A. This property is only necessary if the relevant time spans are unknown (otherwise the relationship can be calculated).

This property is the same as the "overlaps / overlapped-by" relationships of Allen’s temporal logic (Allen, 1983, pp. 832-843).

Example: the Iron Age (E4) *overlaps in time with* the Roman period (E4)

In First Order Logic:

 AP26(x,y) ⊃ E2(x)

 AP26(x,y) ⊃ E2(y)

AP26(x,y) ⊃ P176(x,y)

AP26(x,y) ⊃ P185(x,y)