## 6. Bigger example

Let BOID theory $T_2$ be defined by the following set of rules, together with the formulas on time slots in $W$ that induce material inconsistencies on attending simultaneous presentations.

$$\delta_1 = \text{intrinsically\_interpretable\_explainable\_ai} \xrightarrow{B} \text{timeslot\_1\_a} \quad (\rho = 9)$$

$$\delta_2 = \text{xai\_in\_health-care} \xrightarrow{B} \text{timeslot\_1\_b} \quad (\rho = 9)$$

$$\delta_3 = \text{concept-based\_global\_explainability} \xrightarrow{B} \text{timeslot\_1\_c} \quad (\rho = 9)$$

$$\delta_4 = \text{explainable\_ai\_for\_improved\_human-computer\_interaction} \xrightarrow{B} \text{timeslot\_2\_a} \quad (\rho = 9)$$

$$\delta_5 = \text{logic\_reasoning\_and\_rule-based\_xai} \xrightarrow{B} \text{timeslot\_2\_b} \quad (\rho = 9)$$

$$\delta_6 = \text{xai\_organisation\_[private\_roundtable]} \xrightarrow{B} \text{timeslot\_2\_c} \quad (\rho = 9)$$

$$\delta_7 = \text{fairness\_trustworthiness\_and\_trust\_calibration\_in\_xai} \xrightarrow{B} \text{timeslot\_3\_a} \quad (\rho = 9)$$

$$\delta_8 = \text{evaluation\_and\_benchmarking\_in\_xai} \xrightarrow{B} \text{timeslot\_3\_b} \quad (\rho = 9)$$

$$\delta_9 = \text{notions\_and\_metrics\_for\_explainable\_ai} \xrightarrow{B} \text{timeslot\_3\_c} \quad (\rho = 9)$$

$$\delta_{10} = \top \xrightarrow{O} \text{xai\_in\_health} \quad (\rho = 8)$$

$$\delta_{11} = \top \xrightarrow{O} \text{intrinsically\_interpretable\_explainable\_ai} \quad (\rho = 7)$$

$$\delta_{12} = \top \xrightarrow{D} \text{concept-based\_global\_explainability} \quad (\rho = 6)$$

$$\delta_{13} = \top \xrightarrow{D} \text{explainable\_ai\_for\_improved\_human-computer\_interaction} \quad (\rho = 5)$$

$$\delta_{14} = \top \xrightarrow{D} \text{logic\_reasoning\_and\_rule-based\_xai} \quad (\rho = 4)$$

$$\delta_{15} = \top \xrightarrow{D} \text{xai\_organisation\_[private\_roundtable]} \quad (\rho = 3)$$

$$\delta_{16} = \top \xrightarrow{D} \text{notions\_and\_metrics\_for\_explainable\_ai} \quad (\rho = 2)$$

$$\delta_{17} = \top \xrightarrow{D} \text{evaluation\_and\_benchmarking\_in\_xai} \quad (\rho = 2)$$

$$\delta_{18} = \top \xrightarrow{D} \text{fairness\_trustworthiness\_and\_trust\_calibration\_in\_xai} \quad (\rho = 1)$$

Table 3.: Sample schedule of a more extensive conference program

| | **Time slot 1** | **Time slot 2** | **Time slot 3** |
|---|---|---|---|
| **A** | Intrinsically interpretable Explainable AI | Explainable AI for improved human-computer interaction | Fairness, trustworthiness and trust calibration in XAI |
| **B** | XAI in health-care | Logic, reasoning and rule-based XAI | Evaluation and benchmarking in XAI |
| **C** | Concept-based global explainability | XAI organisation [private roundtable] | Notions and metrics for explainable AI |

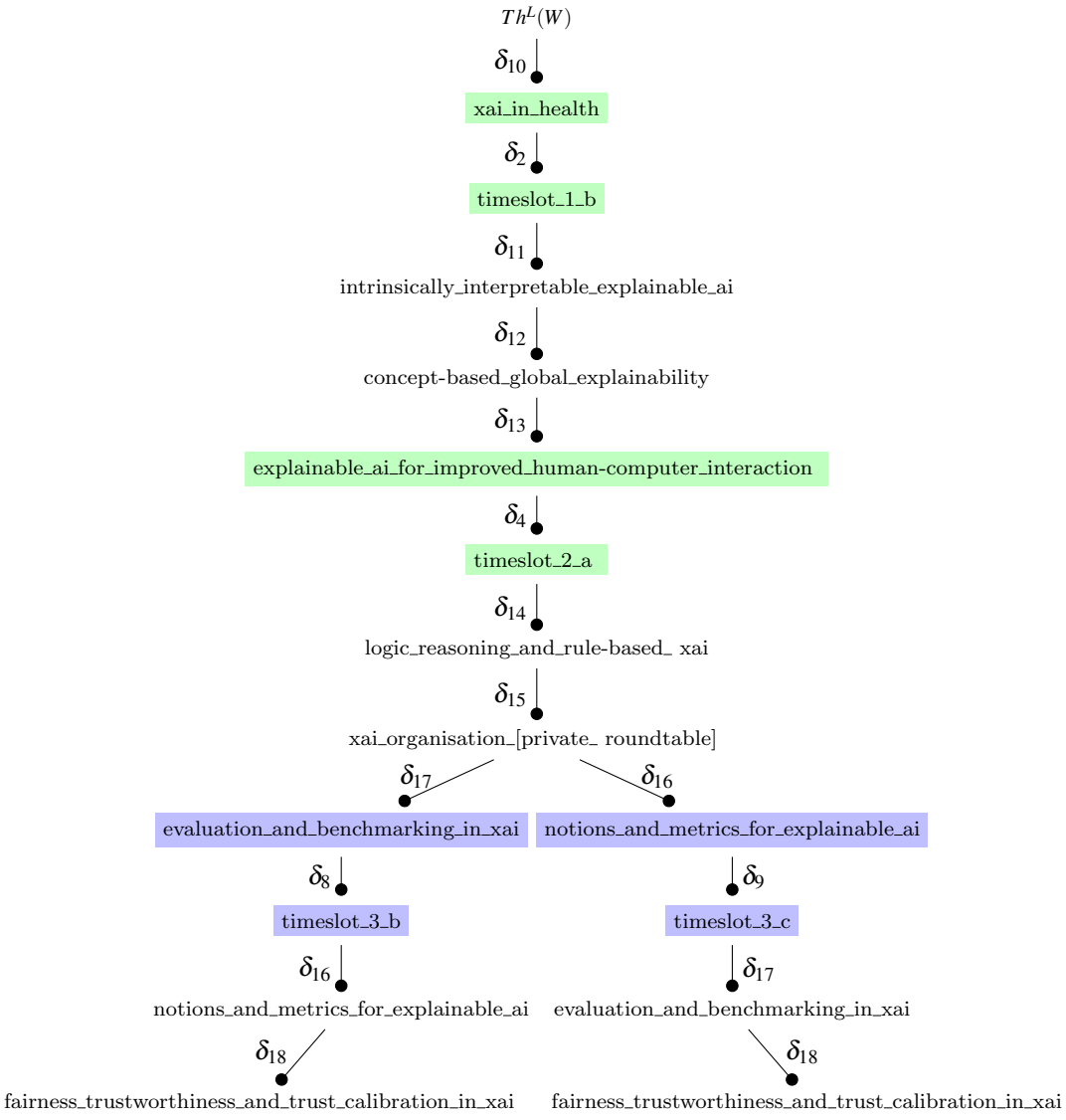


**Figure 3.** The (prioritized) process tree of $T_2$.