Using the provided predicates and patterns for creating a security case for Instant Messaging (IM) software, let's translate this into a hierarchical tree structure. We instantiate the placeholders `{software}` with "Instant Messaging (IM) software" and `{system}` with "operational environment." Similar placeholders within context and goal definitions are replaced appropriately:

- Goal (G1, "Instant Messaging (IM) software is acceptably secure in operational environment")

- Context (C1, "Definition and description of Instant Messaging (IM) software")

- Context (C2, "Definition and description of operational environment")

- Context (C3, "Definition of acceptably secure")

- Strategy (S1, "Argument that Instant Messaging (IM) software assets are under protection")

- Justification (J1, "Protection of Instant Messaging (IM) software assets supports that software is acceptably secure")

- Goal (G2, "All identified Instant Messaging (IM) software critical assets are protected")

- Context (C4, "List of Instant Messaging (IM) software critical assets")

- Strategy (S2, "Respective arguments of Instant Messaging (IM) software critical assets")

- Justification (J2, "Relationship between assets is clear and can be argued separately")

- Goal (G3, "Instant Messaging (IM) software critical asset is protected")

- Strategy (S3, "Argument of the type which the Instant Messaging (IM) software critical asset belongs to")

- Context (C5, "List of Instant Messaging (IM) software critical asset types in PEDD (Platform and Environment Data Dictionary)")

- Justification (J3, "Types of Instant Messaging (IM) software assets are according to PEDD")

- Goal (G4, "Instant Messaging (IM) software critical asset which belongs to specified type is protected")

- (Placeholder for several (here 4 instances due to cardinality "number of software critical asset = 4") instances of G4 specialized by asset type.)

This hierarchical representation follows the connections as defined by the predicates:

- `SupportedBy` relationships build the hierarchical connections between goals, strategies, and solutions.

- `IncontextOf` relationships attach necessary contexts and justifications at relevant depths.

- `HasPlaceholder` and `HasMultiplicity` indicate where instantiation and several specific similar goals need to be addressed respectively.

This approach provides a structured and systematic means of detailing, through GSN (Goal Structuring Notation), how the security of the Instant Messaging (IM) software is argued within the specified operational environment using identified assets and assumptions about security.