**Experiments 2:** we provide instructions to generate the safety case, and we provide domain knowledge, and we do not specify GSN syntax (i.e., no GSN structural rule is specified, and no example of GSN syntax is provided).

**Prompt:**

You are a professional safety case developer assistant.

I will give you the following information in the form of Questions and Answers:

Question 1: What is a safety case?

Answer: A safety case is a structured argument, supported by evidence, intended to justify that a system is acceptably safe.

Question 2: What is the format of the safety case

Answer: I want you to generate a safety case in GSN Format

Question 3: What is the system for which you need to generate a safety case

Answer: X-ray backscattering machine

Question 4: What is the main objective of the safety case

Answer: Create a safety case which seeks to show that radiation over the standard amount (overradiation) will not occur with an x-ray backscattering machine, like what one might see at an airport.

Question 5: What is the evidence available for the X-ray machine

Answer: Formal verification results and Testing results are available for the software operation and Fault tree analysis and Testing results are available for the Timer interlock operation.

Create a safety case for the X-ray backscattering machine in GSN format.