MODELING I

!apply For WP

Because of the rules for weak sequencing

MODELING II

? released

? rejected

Because of the rules for weak sequencing and the ALT

MODELING III

Choosing the strip interpretation of OPT, it follows that any trace must have 26 events corresponding to 13 messages. The correct answer is 26.

MODELING IV

There are two sources of non-determinism

1) The ordering of ?presentApplication and !presentAdvice is not fixed

2) The choice of alt operand.

In both cases we get 2 possibilities leading to 4 traces of length n.

MODELING V

Could be depending on whether get AdditionalInfo describes negative traces or not.

MODELING VI

To get the shortest possible trace, we have to select the skip option from the OPT. In that case each execution will involve 11 messages. Since traces are only concerned with lifelines and not gates, we get traces of length 11.

MODELING VII

! apply For WP

! get Related WPs

! get Related Deviations

Because the ordering is only determined by the orderings on each separate lifeline.

REFINEMENT I

One possibility is to add a third operand to
the ALT whose ^(select) traces are different from those
of the two first operands.

REFINEMENT II

One possibility is to make the traces of one
ALT operand negative by using the REFUSE
operator

REFINEMENT III

YES. The traces corresponding to skip remains
positive, while all the other traces became
negative

REFINEMENT IV

It should be replaced by the XALT because
we want to keep both possibilities without
risking one being refined away.

REFINEMENT V

It is not because Release contains traces that ~~they are~~ are inconclusive wrt each interaction obligation of Release×alt.

REFINEMENT VI

~~The~~ The interaction obligation of Release supplements each of the interaction obligations of Release×alt.

REFINEMENT VII

The solution is to make the operands of the XALT mutually exclusive. We keep the positive behaviour of both but make the positive behaviour of the first negative in the second, and the other way around.

SECURITY RISK ASSESSMENT I

There are four risks, one for each pair of unwanted incident and asset being related.

SECURITY RISK ASSESSMENT II

Assign a likelihood to the treat scenario that is lower than the likelihood of the threat scenario multiplied with the conditional probability connecting them.

SECURITY RISK ASSESSMENT III

Change the ~~value~~ likelihood of the threat scenario to be greater than the product. It is then only consistent if there are other not yet described ways to cause it

SECURITY RISK ASSESSMENT IV

A correct proposal should be a table of the form

NAME OF VALUE	INTUITIVE NATURAL LANGUAGE DEFINITION OF VALUE OF RELEVACE FOR ASSET.
⋮	⋮

Normally, a good natural language definition would involve an additional sentence giving an example.

SECURITY RISK ASSESSMENT V

Should be either a difference scale or a ratio scale. One possibility is a scale of intervals based on downtime.

SECURITY RISK ASSESSMENT VI

As for IV with the exception that the natural language definition should address likelihood.