Validation rule and its implementation on basis VBA-codes

What must be done?

Software have to check validity of the Event list property such as “COLLECTIVELY EXHAUSTIVE”, namely, a sum of event’s probabilities of the Event List is 1?

For this purpose, system must be able to implement the functional requirement SRS4.11:

SRS4.11: Software must start to solve a problem only if the property of the Event List is the collectively exhaustive. It means that sum of the event’s probabilities of the set of events is satisfying the constraint:

How would it be made?



Figure 4.3.1: Flow-chart of the algorithm to validate collectively exhaustive property of the Event List.

**Note:** The algorithm on Figure 4.3.1 can be implemented by using two approaches. ***First approach*** is submitted in the file “DMT(ValidationRuleWithVBA\_Ver-3\_3pages)\_2017.01.20.docx” on the base of ***VBA-codes***. ***Second approach*** is submitted file “DMT(ValidationRuleWithMacros\_Ver-1\_7pages)\_2017.01.20.docx” on the base of ***macros***. Since both approaches implement the same algorithm the results will be same. There is one of them required to implement in the system. It is impossible to implement both approaches in the single system simultaneously!

Programmer manual

1. Create the table “tbl\_ParametersOfEventList” to save a tolerance value of result of computing the sum of probabilities of the given Event List;
2. Create the table “tbl\_SumOfProbabilities” to save the result of computing the sum of probabilities of the given Event List from “qry\_EventList”;
3. Create the query “qry\_SumOfProbabilities” to compute a sum of probabilities of the given Event List from “qry\_EventList”;
4. Create the query “qry\_DeleteSumOfProbabilities” to delete out-of-date records from the table “tbl\_SumOfProbabilities”;
5. Create the Event Procedure as it’s shown on the screenshots below:





