Reviewer #1: This paper presents how to use  SACM (Structured Assurance Case Metamodel), a meta-model being developed in OMG, and  briefly shows a tool based on Eclipse which translates from existing graphical notation such as GSN into SACM.

-Thank you very much for taking the time to provide such a detailed review, with these constructive suggestions. We have responded to all the comments with 1) changes to the paper and 2) clarifications. We hope that the revised paper matches to your expectation and is sufficient for publication.  
  
Unfortunately, this paper is not enough for a journal paper:  
  
1. There are many sentences which are not supported by evidence or other arguments. For example,

* In abstract, SACM provides a solid foundation for model-based system assurance, which bears great application potentials in growing technology domains such as Cyber-Physical Systems and Internet of Things.  
    -> why it is "a solid foundation"," great application potential", etc,
* Page 7,   
  SACM provides a complete solution for model based system assurance case construction.  -> I do not understand the meaning of "complete solution".  If it is to be "complete solution", then a definition of "complete solution" is needed.

-Thank you very much for your comment.

To further explain our claim in detail, we have added some contents in Section 2.3 summarising the features in SACM that are not supported by GSN ane CAE.

-SACM is developed based on 20 years of experiences in system assurance with two well established argument notations: GSN and CAE.

Being based on these two notations (both with an established track record, including usage for open and adaptive systems) and with additional features (that have been proposed and evaluated by GSN/CAE practitioners), SACM provides a defensible foundation for system assurance for emerging system concepts such as CPS (which is essentially a type of open adaptive system), where model-based assurance cases are the key to system assurance at runtime.

Through the provision of an OMG standard, with the associated obligations of the provision of a fully specified metamodel, SACM provides a clearer basis than GSN and CAE for a model based approach.

-We have changed the section in page 7, with additional explanation on assuring open adaptive system at runtime.  
  
2. It is unclear what are the author's contributions.   
The first part of the paper is an introduction of SACM and GSN, which are not new. I think the authors university has been participating in developing SACM in OMG, but the Standard has been already published by OMG.

-Whilst there are many contributors of the standard, the authors are the principal contributors of SACM.

The standard follows the expected form and functions of an OMG standard, but that can be insufficient for people to grasp the meaning the usage of the notations in the standard.

This paper addresses the insufficiency by providing an exposition of SACM via examples.

-The SACM version discussed in this paper is of version 2.0, which was released in May 2018. SACM v2.0 makes rather a large number of enhancements to the standard compared to SACM v1.0, such as: more detailed modularity support, multiple language support, counter arguments, evidence-artefact traceability, describing level of trust for arguments, etc.

-As the originators of GSN, we are aware of how much effort and industry involvement it has taken to reach the level of adoption of GSN over a 25 year period. And the number of organisations have made a significant commitment in making GSN as their primary safety case development technique (e.g. EuroControl safety case development manual).

-We acknowledge that for assurance practice to evolve, model-based system assurance is fundamental. SACM provides a more comprehensive platform towards this direction. Hence we felt the need to explain SACM in detail in order for it to be adopted by industry

   The second part of the paper is an example of SACM application and a tool explanation which translates GSN into SACM.

* The example of SACM usage seems new, but it is just briefly described and there is no evaluations how the model with assurance cases is effective.

-We have included a table containing the features in SACM that are not supported by GSN/CAE, with corresponding references to works that motivated such features.

* There are several existing tool such as ASCE(https://www.adelard.com/asce/choosing-asce/standardisation.html) and D-Case Editor(<https://github.com/d-case/d-case_editor>) which support conversion between SACM and other meta-models.

-We have included a discussion in Section 2.2, which lists a number of model-based assurance case tools, including ASCE and D-Case. We also explained that the support for SACM claimed by these tools are for SACM v1.0, which is replaced by SACM 2.0. Hence, the support for SACM is out-dated.

* Comparison with existing tools are not appropriate. For example, in page 4,   
  "A number of drawing tools have been developed [10-14] to produce GSN diagrams. Although GSN diagrams produced by the majority of the tools are valuable in communicating safety argumentations amongst stakeholders, these diagrams cannot be consumed and interpreted by computers (e.g. automated validation of safety argumentation, automated generation of safety case reports)."  
  I think , at least,  ASCE tool supports semi-automatic validating function. If the authors really want to say "these diagrams cannot be consumed and interpreted by computers (e.g. automated validation of safety argumentation, automated generation of safety case reports).", more detailed and technical explanation is needed.

-We have restructured Section 2 to discuss our motivations incrementally. We pointed out the shortcomings of existing tools. For ASCE, the validation functions are embedded in the tool, the model produced by ASCE is not visible to the users, therefore, user defined operations are not permitted.

* Also,   
  " Some GSN tools support exporting GSN diagrams into machine consum- able models [13,14]. However, these tools implement their own versions of the GSN metamodels, which do not consider the links from safety argumentations to their supporting evidence. Therefore, there is little value in performing model management operations on them. " -> This seems wrong. In Astah GSN support page (<http://astah.net/editions/gsn>), it says it supports SACM, and if SACM is able to do so as the authors describe, then Astah GSN also can do so.

-Like previously mentioned, the claimed support for SACM for existing tools are out-dated. This transitively out-dates the GSN2SACM transformation provided by these tools. In addition, there is no visibility for the GSN to SACM transformation. If the future is model based assurance case, the transformation from GSN/CAE to SACM need to be visible in the MDE domain (and need to be standardised, too). Currently , the transformations are hard-coded to the tools that support SACM.

Overall, the paper lacks sufficient claims, evidence and arguments. Unfortunately at this time, the paper is not appropriate to be accepted.

-We have added contents in Section 2 to incrementally motivate our work, with references to existing works that back our claims. We provided a summary of motivations at the end of Section 2. We hope these changes are sufficient to explain our motivations for this work. Thank you very much for your time.