***SysML v2 RFP WG,***

The following is a summary and follow-up actions from our 1.5 day face-to-face Working Group meeting at the OMG meeting in Coronado on December 6 and 8, 2016. My thanks to all who contributed. The meeting summary and related material is posted on the Coronado meeting page at:

<http://www.omgwiki.org/OMGSysML/doku.php?id=sysml-roadmap:coronado_december_2016_meeting_presentations>

Hedley will provide the web and dial up information for our next WG telecon on Wednesday, January 11, at 11:00 AM ET, where we will review the meeting results, and discuss the status of the follow-up actions and plans for the next OMG meeting the week of March 20.

*Our WG objective is to prepare the initial draft requirements for the RFP by the March meeting so we can stay on schedule to present a draft RFP at the June meeting, and vote to issue the RFP at the September, 2017 meeting. I request all your support to help achieve this important milestone by aggressively working the follow-up actions below.*

**FOLLOW-UP ACTIONS**

* Sandy to post meeting summary and presentation slides to the WG Wiki
* Hedley to provide web session for the next WG telecon on Wednesday, January 11, at 11:00 AM ET
* All to review this meeting summary and provide comments
* Notify Sandy if attending the INCOSE IW SysML v2 RFP meeting on Sunday, January 29

***The following actions are to update the formalism requirements and approaches***

* Formalism – Jonathan Patrick
  + Update formalism requirements, formalism alternatives with pros and cons, and use cases that drive the need for formalisms based on discussion
  + Continue to identify additional formalism alternatives and contrast their similarities and differences, their underlying mathematics, and pros and cons

***The following are the actions to update the capability concepts and associated service requirements***

* Capability Concepts and Service Requirements – Capability Concept Leads (Model Construction, Visualization, Analysis, Management, Workflow & Collaboration)
  + Respond to feedback from Coronado
  + Continue to refine concept figures (e.g., OV-1)
  + Update service requirements and identify and define terms using ISO conventions to ensure service requirements are clearly specified
  + Coordinate with John W to ensure service req’ts and glossary terms are captured in model
* Model Visualization – Chris Schreiber
  + Update requirements for concrete syntax
* Standard API and Service Requirements – Manas, Jeff, Axel, Ed
  + Develop a prototype to evaluate, demonstrate, and validate the standard API and Service requirements and approach

***The following are the actions to update the Systems Engineering Concept Model (SECM) and associated requirements***

* Properties and Expressions Concepts – Hans Peter de Koning
  + Evaluate alternative default expression languages (e.g., Marte, Modelica, and ALF)
  + Update concepts and examples
  + Update requirements
* Structure Concepts – Hans Peter de Koning
  + Establish minimum core structure concepts that build on Properties and Expressions
  + Refine requirements and examples
* Interface Concepts - Marc Sarrel
  + Include concepts associated with physical constraints (e.g., Kirchoff’s Laws)
  + Update concepts and examples
  + Integrate with Structure Concepts
  + Develop draft requirements
* Behavior Concepts - TBD
  + Develop concepts and examples
  + Develop requirements
* Requirements Concepts – John Watson
  + Update concepts and examples
  + Update requirements
* Variability Concepts – Hedley Apperly/Tim Weilkiens
  + Update concepts and examples
  + Update requirements
* Common Element Concepts – TBD
  + Develop concepts and examples
  + Update requirements
* Safety/Reliability Interface Concepts – Geoffrey Biggs
  + Identify concepts needed to integrate with Safety & Reliability concepts

***The following are actions to support the development of a model-based specification. –*** *Robert Karban, John Watson*

* Robert Karban to coordinate with John W to auto-generate an initial draft RFP to demonstrate the capability for a model-based specification using RFP template populated with initial requirements from the model
* John to coordinate and provide access to SECM

***The following are actions to support planning and follow-on development and approval of the RFP***

* Sandy to draft the agenda for the 2.5 day WG meeting (Tuesday and Thursday) on March 21-23, 2017 at the OMG meeting in Reston (refer to topics for the Reston meeting below). We will also include a ½ day SE DSIG meeting on Tuesday morning as we have done the last 3 meetings.
* Sandy to coordinate with Jim Odell/Jim Logan to schedule time on the ADTF agenda in March to present the updated status and plans for the SysML v2 RFP

**The following sections are included below:**

* Background
* Meeting Summary
* Next WG Meeting on March 21-23, 2017 in Reston, Virginia

Sanford Friedenthal

SysML v2 Working Group Chair

safriedenthal@gmail.com

**BACKGROUND**

The SysML v2 RFP WG was kicked off on July 23, 2016 at the end of the System Modeling Assessment & Roadmap WG meeting in Orlando, Florida. This concluded an approximate year-long effort to establish a baseline concept for a System Modeling Environment (SME), which is being used to help derive the requirements for the SysML v2 RFP.

The initial high level requirements for the SME are documented in the August 2015 edition of the INCOSE Insight, which has MBSE as its theme. The article is entitled *'Evolving SysML and the System Modeling Environment to Support MBSE'* and defines 7 capabilities, 8 measures of effectiveness (moe's), and 11 driving requirements for the SME. This article was the first key milestone for SysML v2 development. A second article was published in the December, 2016 edition of the INCOSE Insight. This article is entitled *'Evolving SysML and the System Modeling Environment to Support MBSE – Part 2'* and summarizes the baseline SME Concept along with the high-level approach to the RFP. Both articles are available under the Articles section of the SysML v2 RFP Working Group home page at:

<http://www.omgwiki.org/OMGSysML/doku.php?id=sysml-roadmap:sysml_assessment_and_roadmap_working_group>

The Coronado meeting is the second meeting following the RFP kickoff in Orlando. The objectives for these meetings are to develop the requirements and issue the SysML v2 RFP.

**MEETING SUMMARY**

The objectives and agenda for our WG meeting on December 6 and 8 in Coronado are included below:

**Meeting Objectives**

1. Review requirements for standard API and services
2. Review language formalism approaches
3. Agree on general approach for concrete syntax requirements
4. Review updates to the SECM
5. Review concept figures (OV-1’s)
6. Review/update plans for SysML v2 RFP

**Meeting Agenda**

*Tuesday, December 6, 2016*

13:00 - 13:30 Introduction & Chicago Meeting Summary - Sandy Friedenthal

13:30 - 14:30 Requirements Standard API and Services - Ed Seidewitz/Manas Bajaj

14:30 - 15:00 Break

15:00 - 16:00 Requirements for Standard API and Services (cont.) - Ed Seidewitz/Manas Bajaj

16:00 - 16:45 Alternative Formalisms - Jonathan Patrick

16:45 - 17:00 SysML v2 Interface with Safety & Reliability – Geoffrey Biggs

*Thursday, December 8, 2016*

09:00 - 09:45 Concrete Syntax Requirements - Chris Schreiber

09:45 - 10:00 Systems Engineering Concept Model (SECM) Status Update - John Watson

10:00 - 10:30 Draft RFP Requirements for Properties and Expressions - Hans Peter de Koning

10:30 - 11:00 Break

11:00 - 11:30 Structure Concepts WG Status - Hans Peter de Koning

11:30 - 12:00 Initial Draft Interface Concepts - Marc Sarrel

12:00 - 13:00 Lunch

13:00 - 13:30 Initial Draft Interface Concepts - (cont.) - Marc Sarrel

13:30 - 14:30 Initial Draft Requirements Concepts - John Watson

14:30 - 15:00 Break

15:00 - 16:00 SME Concept Updates - Concept Leads

16:00 - 17:00 SysML v2 RFP Planning - Sandy/All

**Requirements for Standard API and Services.** Ed Seidewitz presented the Standard API requirements for review that he, Axel, and Sandy developed. These requirements reflected the outcome from the discussion at the last meeting in Chicago. The API will enable clients to access and operate on SysML data using a standard set of service requests. In order to enable the API to not be constrained to a specific technology, the API will be defined by a standard platform independent model with platform bindings for specific technologies such as Java, rest-based web services, and query languages such as SPARQL. Additional constraints may be imposed on the API model and selected platform bindings.

Manas Bajaj presented the results of his effort to further specify the analysis service defined as *‘setup, validate, and execute models ((e.g., system models, analysis models, validation rules)’*. Manas provided an elaboration of this service that he derived from the analysis scenarios that he and his team developed. He recommended that we include more detail in the service requirements to reduce the ambiguity. After considerable discussion, the WG agreed to specify each of the 13 service requirements as a discrete set of functions, and provide a definition of each key term. Sandy also proposed that each term be included in the Systems Engineering Concept Model (SECM).

The updated API requirements which is available under the [Presentations section of the Coronado meeting page](http://www.omgwiki.org/OMGSysML/doku.php?id=sysml-roadmap:coronado_december_2016_meeting_presentations#presentations) and under the Review Documents section of the [SysML v2 Interoperability WG page](http://www.omgwiki.org/OMGSysML/doku.php?id=sysml-roadmap:systems_engineering_interoperability_working_group#review_documents). As a follow-up to this meeting, Manas agreed to lead an effort to develop a prototype to demonstrate and validate the API requirements for the analysis services, which he will present at our next meeting in Reston.

**Conformance requirements.** As part of the standard API discussion, we briefly reviewed the conformance requirements. The conformance approach defines a set of test cases that requires a SysML v2 implementation to import a reference model, and provide a response to standard service requests. The service response is evaluated for conformance to the specification based on the test cases.

Vendors may choose levels of conformance to support that may include specific services and language bindings, as well as other aspects of the SysML v2 specification such as data model conformance, and view and viewpoint conformance. An additional conformance requirement was recommended to evaluate a SysML v2 implementation’s ability to transform SysML v1 models to SysML v2 models.

**SysML v2 formalism alternatives.** During the last meeting in Chicago, Jonathan Patrick presented the draft requirements for SysML v2 Formalisms, which are available under the OMG Presentation section of the [Formalism Wiki](http://www.omgwiki.org/OMGSysML/doku.php?id=sysml-roadmap:sysml_v2_model_formalism_working_group). The formalism requirements were defined for the semantics, abstract syntax, and concrete syntax, all of which are intended to be extensible.

During this meeting, Jonathan and Conrad Bock presented updated requirements and the benefits associated with each requirement, alternative formalisms, and qualitatively evaluated the potential to which each alternative could satisfy the requirements. It was emphasized that the formalism should not overly constrain the user to support more flexible modeling (referred to as sketching). The seven (7) alternative formalisms are identified in terms of their connection to UML, which varied from fully constrained by the UML metamodel to completely independent languages. *In order to satisfy the requirements, the results indicated that the SysML v2 formalism cannot use the UML metamodel without changes, and must at a minimum refactor and specialize the UML metamdodel, and add mathematical and model library representation of UML/SysML semantics, along with potential changes to the extension mechanism and interchange format.* Their recommended formalism approach is to establish a minimum set of base semantics, and extend the semantics as needed through model libraries. This presentation is available under the [Presentations section of the Coronado meeting page](http://www.omgwiki.org/OMGSysML/doku.php?id=sysml-roadmap:coronado_december_2016_meeting_presentations#presentations) and under the OMG Presentation section of the [Formalism Wiki](http://www.omgwiki.org/OMGSysML/doku.php?id=sysml-roadmap:sysml_v2_model_formalism_working_group).

The follow-up is to continue to refine the requirements and alternative approaches. In addition, Sandy is requesting further identification and comparison of other alternative formalisms such as graph, relational, OO, and OWL formalisms in terms of their underlying semantics, and pros and cons. Cory Casanave also suggested Jonathan consider OWL-DL as an alternative.

**Concrete syntax requirements.** Chris Schreiber led a discussion on the initial requirements for the concrete syntax, and presented an overview to seed the discussion, which is available under the [Presentations section of the Coronado meeting page](http://www.omgwiki.org/OMGSysML/doku.php?id=sysml-roadmap:coronado_december_2016_meeting_presentations#presentations). There was general agreement that SysML v2 shall:

* Provide a flexible view and viewpoint capability that includes graphical, textual, tabular, and numerical presentation methods
* Provide standard viewpoints and views for SysML v1 diagrams (assists transition from v1 to v2)
* Provide a standard mapping language between concrete syntax and abstract syntax
* Provide a standard graphical concrete syntax that maps to the abstract syntax
* Provide a standard graphical textual syntax that maps to the abstract syntax
* Provide ability to specify domain specific concrete syntax (e.g., symbol sets) that maps to the abstract syntax
* Provide a simple geometric view as a standard diagram\*
* Provide a standard viewpoint library (platform independent model with platform bindings)
* Provide diagram interchange and/or exchange of the viewpoint method to regenerate the view
* Provide persistent views to support documentation and reports

\* The geometric view is intended to specify geometric envelopes and requires concepts of shape and coordinate system. Refer to STEP standards.

In addition, SysML v2 should provide visualization services such as support for auto-layout, dynamic visualization (e.g., user dynamically select scope of model, filters, layers, etc.), as well as manual diagram layout capability. The ability to specify diagram layers that consist of a group of diagram elements which can be displayed (e.g., turn on or off, assignment of colors or offsets, etc.), is considered an essential feature of SysML v2 views.

**Model management requirements.** Laura Hart presented the concept and proposed requirements for model management that she and her team (Uwe, Christian, Michael, Pawel, and Patrick) have evolved. The concept is available under the [Presentations section of the Coronado meeting page](http://www.omgwiki.org/OMGSysML/doku.php?id=sysml-roadmap:coronado_december_2016_meeting_presentations#presentations) and under the Review Documents section of the [Model Lifecycle Management Wiki](http://www.omgwiki.org/OMGSysML/doku.php?id=sysml-roadmap:model_lifecycle_management_working_group).

A fundamental aspect of model lifecycle management is that must include management of the SysML model and the links to other models and data that are interconnected through the system modeling environment. Model management must manage change to the element level that includes versioning, configuration control, permissions, the change process, and change history. These require support for model management services that include access control, branch and merge, version definition, and model diff.

The SE DSIG presentations from both the Coronado and previous Chicago meetings (available from the [OMG SE DSIG page](http://syseng.omg.org/)) provide excellent examples of approaches to model management, including the presentations on mecPro2, Jazz environment, and OpenMBEE.

The services must also support management of the metadata throughout the change process. There was considerable discussion on the key metadata requirements. The minimum essential requirement is that each model element have a unique id. In addition, the metadata requirements for selected element types include version, author, element description, and permissions. Metadata requirements for status and date information is still under discussion. It was also noted that the MOF Versioning OMG standard may provide a useful basis for defining the key model management concepts and metadata.

**Workflow and collaboration requirements.** Hedley Apperly presented the concept and proposed requirements for Workflow and Collaboration. The concept is available under the [Presentations section of the Coronado meeting page](http://www.omgwiki.org/OMGSysML/doku.php?id=sysml-roadmap:coronado_december_2016_meeting_presentations#presentations) and under the Review Material section of the [Workflow and Collaboration Wiki](http://www.omgwiki.org/OMGSysML/doku.php?id=sysml-roadmap:mbse_workflow_and_collaboration_working_group).

The proposed concept describes an overarching workflow that begins with developing the practices and capturing them in a master practices repository. These practices are tailored to a particular project, and used as an input for project planning, execution, and monitoring. As part of the planning process, the tasks are assigned to roles, and roles are assigned to individuals to perform the task. To accomplish this, the individual is notified to begin the task, may be provided guidance on the execution of the task, and provides status/metrics on the performance of the task.

There was considerable discussion on the minimum requirements for SysML v2 in terms of what services are required, and what metadata is supported. Hedley proposed requirements that reflect a full process management capability specified by the OMG Software and Systems Process Engineering Metamodel (SPEM). The current agreement by the team is to limit the requirements to a subset of the SPEM capability to support services related to the following:

* assign roles to task
* assign users to roles
* notify user of task requirements (e.g., start date, completion date)
* identify the model scope to be reviewed and/or updated by this task (i.e., a task change set)
* provide access permissions to the model scope
* provide task guidance (e.g. enable execution of practice from the practice repository that may include use of patterns, model libraries, wizards, etc.)
* user provides task status and metrics

**Systems Engineering Concept Model (SECM).** John Watson provided an SECM Status Update which is available under the [Presentations section of the Coronado meeting page](http://www.omgwiki.org/OMGSysML/doku.php?id=sysml-roadmap:coronado_december_2016_meeting_presentations#presentations) and under the Presentations section of the [SECM Wiki](http://www.omgwiki.org/OMGSysML/doku.php?id=sysml-roadmap:systems_engineering_concept_model_workgroup).

The SECM is being derived in part from industry standards such as the SEBoK, ISO 15288 and the INCOSE Handbook, as described in previous meetings. These concepts are used to derive the SysML v2 RFP requirements for both the SysML v2 metamodel and profile. The minimum scope of the SECM is to include concepts consistent with SysML v1 scope, but there are some areas that we further elaborate and/or extend the requirements beyond the scope of SysML v1, such as support for variant modeling. There are several workings groups that are focused on particular parts of the SECM. The intent is to develop these concepts, and then integrate into the broader SECM. The concept areas include the following:

* Properties & Expressions
* Structure
* Interfaces
* Behavior
* Requirements
* Variants
* Interface with Safety & Reliability Profile

A major emphasis is to ensure the concepts have clear definitions, in addition to defining their relationships with other concepts. The SECM includes a glossary of terms which will require careful review as we move forward. We will adopt the ISO procedure for defining terms, which is intended to avoid circular definitions. Substituting the glossary definition for the use of the term in a sentence provides a test of this principle. Furthermore, ISO now has an on-line glossary of the terms used in ISO standards that can serve as a source for SysML v2 definitions.

The SECM will also include the text requirements that will be incorporated into the RFP which will relate back to the concept model and the service requirements. It should be noted that the concepts in the SECM are intended to help validate our shared understanding of the requirements, and sometimes represent specific approaches to the solution. As a result, the requirements are generally more abstract than the concepts to avoid overly constraining the submitter solutions. At the same time, the concepts provide a valuable input to inform the submitters of the requirements intent.

**SECM-Properties & Expressions**. This was the first WG that was initiated to support the SysML v2 SECM. The rationale was that value properties and value types are a fundamental building block that are used as primitives for all aspects of modeling, and that SysML v1 has limitations that need to be addressed relative to its ability to express these quantitative properties, particularly as it relates to integration with analysis models. This concepts for expressions coupled with the value properties and value types, provide the foundations for parametric modeling in SysML.

Hans Peter de Koning, presented a summary of the Properties and Expressions concepts and draft requirements, which is available under the [Presentations section of the Coronado meeting page](http://www.omgwiki.org/OMGSysML/doku.php?id=sysml-roadmap:coronado_december_2016_meeting_presentations#presentations), and under the Driving Requirements section of the [Properties & Expressions Wiki](http://www.omgwiki.org/OMGSysML/doku.php?id=sysml-roadmap:property_modeling_core_team). This concepts and draft requirements have been subject to multiple review iterations. The plan is to distribute the baseline requirements during the 1st week of January.

**SECM-Structure**. This working group was initiated in October, and is also led by Hans Peter de Koning. The WG identified some limitations of current SysML structure modeling, and will refine the structure concepts from SysML v1 to address these issues. In particular, the current focus is on defining a small core set of structure concepts that include Element Definition, Element Usage, and Element Instance (similar to block, part, and instance in SysML v1). These concepts are intended to support modeling of deeply nested part properties to represent complex product structures. Refer to the [Structures Wiki](http://www.omgwiki.org/OMGSysML/doku.php?id=sysml-roadmap:structure_behavior_concepts_modeling_core_team_wiki_page) for the list of modeling issues. The structure modeling concepts will be made available shortly.

**SECM-Interfaces**. Marc Sarrel presented the overview of the interface concepts and some supporting examples, which is available under the [Presentations section of the Coronado meeting page](http://www.omgwiki.org/OMGSysML/doku.php?id=sysml-roadmap:coronado_december_2016_meeting_presentations#presentations) and on the [Interface Concept Modeling Wiki](http://www.omgwiki.org/OMGSysML/doku.php?id=sysml-roadmap:interface_concepts_modeling_core_team). Marc described orthogonal aspects of interfaces including interface definition versus usage, interface realization versus specification, interface layers, and levels of interface abstraction. These orthogonal aspects apply more generally, and should be treated consistently throughout the model.

The concept of an interface definition includes the Interface Ends and an Interface Connection between them. The Interface Ends can contain Item Specifications. An interface usage is shown in an Interface Context that contains two Interface participants each containing a port typed by an Interface End, with an Interface connector between the ports. Marc further elaborates the interface definition and usage concepts, the hierarchical nature of the Interface Ends, and the realization relationship between interface layers. He also refers to an Interface Agreement Specification that constraints the Interface. Both a Component and a Function can be Interface Participants, implying that both Components and Functions can be connected via interfaces. Marc provides several examples to illustrate the concepts.

The follow-on action is to begin to integrate the interface concepts with the structure concepts and properties and expressions concepts, and then to begin to develop requirements to reflect the interface concepts.

**SECM-Requirements**. The Requirements Working Group held its first telecon in early October following some pre-work by John and Sandy. John presented a summary of the Requirements concepts, which is available under the [Presentations section of the Coronado meeting page](http://www.omgwiki.org/OMGSysML/doku.php?id=sysml-roadmap:coronado_december_2016_meeting_presentations#presentations) and under the References section of the [Requirements Concepts Wiki](available%20under%20the%20Presentations%20section%20of%20the%20Coronado%20meeting%20page%20and%20under%20on%20the%20Interface%20Concept%20Modeling%20Wiki.). It anticipates presenting the RFP requirements associated with these concepts at the next meeting in March.

The approach builds on the work done in the SysML v1.5 RTF regarding property-based requirements. A foundational part of the approach is that requirements impose constraints on the design solution. This constraint can be expressed informally in text and/or formally as a constraint expression. A requirement can then contain a required property and an expression that constrains the property. A design property can then be compared to the required property to determine whether the design satisfies the requirement. The requirement can also be specified using constrained natural language statements. The Working Group is working through several key topic areas to establish a robust modeling of requirements.

**SECM-Variant concepts**. Sandy reported that a working group has been formed to identify the minimum variant concepts and associated requirements to be incorporated in SysML v2. This has been a topic of strong interest for several years, and has not been adequately addressed by SysML v1. The results of this effort will be reported on in the near future.

**SECM-Interface with Safety and Reliability concepts**. Geoffrey Biggs is leading the effort to develop a profile for Safety and Reliability, with the goal of issuing the RFP for this profile at the March 2017 meeting in Reston. He was asked to identify the limitations of SysML v1 and the potential needs for SysML v2 to better integrate with this profile. His recommendations are included on slides 29-33. of his presentation to the SE DSIG entitled [SysML Safety and Reliability Profile RFP and Outlook for Safety in SysML v2](http://www.omg.org/cgi-bin/doc?syseng/2016-12-05) ([syseng/2016-12-05](http://www.omg.org/cgi-bin/doc?syseng/2016-12-05)). Geoff identified the need for SysML v2 to specify timings, provide formal logic to support fault propagation analysis and other types of analysis, and to be highly customizable and extensible to facilitate integration of safety and reliability concepts. *He is not suggesting that SysML v2 include all the safety and reliability concepts, since this would result in SysML v2 becoming large, cumbersome, and not maintainable, but rather that SysML v2 provide the needed stub concepts to integrate with other domain specific concepts.* This is an important principle that applies more generally to many other disciplines and domains. Geoff indicated that he will continue to identify integration concepts with safety and reliability as they proceed through the submission process to develop solutions to their RFP.

In an off-line discussion, Geoff and Sandy discussed the importance of including concepts for cause and effect as potential stub concepts for safety and reliability in SysML v2.

**Presentation to ADTF.** Sandy and Ed presented an overview of the SysML v2 RFP effort to the ADTF on Wednesday, December 7. Jonathan and Conrad presented the formalism requirements and alternatives. Some of the discussion resulted in some refinements to the API requirements. It was also recommended that we provide an update on our status at the next OMG meeting in Reston.

**INCOSE IW presentation and meetings.** Sandy will present on overview of our effort at the INCOSE IW. In addition, there will be a SysML v2 RFP meeting on Sunday, January 29 all day to take the opportunity to meet with participants who normally do not attend the OMG meetings. Sandy will prepare an agenda for that meeting. Let Sandy know if you plan to attend and/or if you have a topic you wish to be included on the agenda.

**RFP planning.** We plan to have initial draft requirements by the next OMG meeting the week of March 20 in Reston. The high-level plan is shown below.

Aug 2015: Driving Requirements (INCOSE MBSE Themed Insight Article)

June 2016: RFP Objectives, Scope, and Outline (Draft)

Dec 2016: SME Concept (INCOSE INSIGHT Article)

Jan 2017: Presentation at INCOSE IW

Mar 2017 Initial Draft Requirements (SECM, API, Concrete Syntax, Formalism)

June 2017: Draft RFP and Presentation to ADTF (Submit May 8)

Sept 2017: Reviews Complete

Sept 2017: Issue SysML v2 RFP

Sept 2017: Form SysML v2 Submission Teams

The key work in preparation for the March meeting includes:

* Update formalism requirements and alternatives
* Develop a prototype of the standard API requirements and approach for analysis services
* Refine the service requirements and definitions of terms
* Update the SECM and the associated requirements
* Capture the requirements in the model
* Demonstrate the ability to auto-generate a draft RFP from the model

**NEXT WORKING GROUP MEETING ON MARCH 21-23, 2017 IN RESTON, VIRGINIA**

The following are tentative topics for the SysML v2 RFP Working Group meeting in Reston, Virginia. The meeting is scheduled for Tuesday afternoon, and all day Wednesday and Thursday (March 21-23, 2017). As we have done for the last 2 meetings, Tuesday morning is planned to be an SE DSIG meeting. The following is an initial set of agenda topics:

* Introduction
* Model-based specification approach
  + Model content
  + Auto-generation of RFP
* Formalism requirements
* Prototype Presentation and Demonstration of API Requirements – Manas/Jeff/Ed/Axel
* Draft service requirements
  + Model construction
  + Model visualization
  + Model analysis
  + Model management
  + Workflow and collaboration
  + Model maintenance (NEW)
* Data Model
  + SECM Status
  + Properties and Expressions
  + Structure
  + Interfaces
  + Behavior
  + Requirements
  + Core Elements
  + Variants
* Glossary Review
* Other Topics
  + Requirements for standard file format and transformation between SysML versions – TBD
  + Requirements for SysML/UML Interoperability – Ed
* RFP Planning
  + Draft available for June 5 presentation to ADTF
  + Prototype plan to support RFP Issue at Sept Mtg
  + Identify RFP review passes
    - May include passes for SysML v1 issues, top level moe’s and reqts, changes from SysML v1.5 and backward compatibility, extensibility and maintainability, usability, integration with other OMG standards (e.g., UML, UAF, UTP, Safety & Reliability, ..) , consistency between service requirements and data requirements