

API Standardization Process

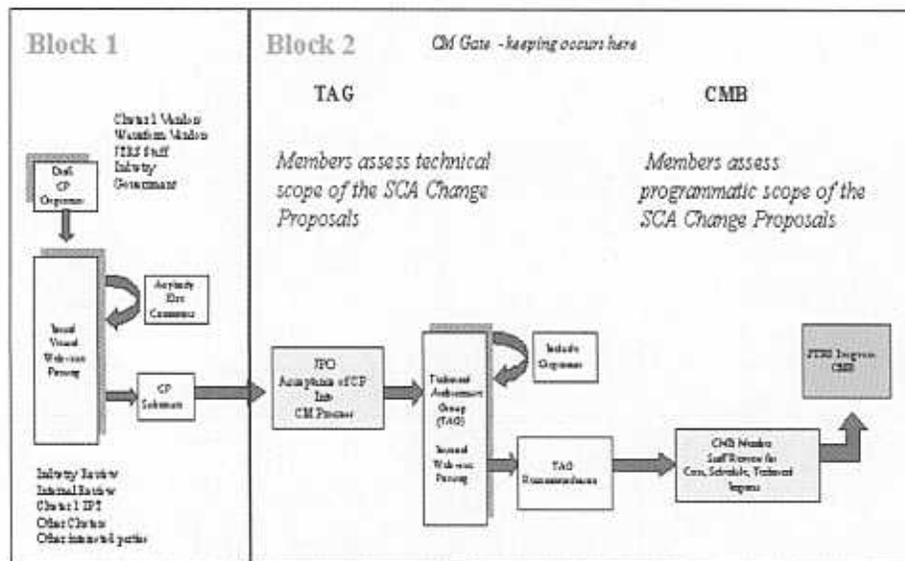
1.0 INTRODUCTION.

In order to define and develop a minimum set of common APIs there must be coordination between the multiple developments for JTRS waveforms and JTR Sets. The process to accomplish this is similar to the SCA Change Proposal (CP) Process as described on the JTRS website: <http://jtrs.army.mil> with the exception that APIs should not be registered as a mandatory set until they are implemented and tested.

2.0 API PROCESS.

2.1 Formal API Acceptance Process. Figure 1 depicts the CP Process that is already in place for adjudication of SCA Change Proposals. The API standardization process will operate similarly to the Block 1 SCA CP process with final technical review by the Technical Architecture Group for registration approval by the CMB.

SCA API Process



- Process drafted through JPO meetings / consensus
- Process is defined on the SCA web-site
- Process is built into SCA web-site functionality

Figure 1

The existing CP Process web site will be used. Proposed API documents will be labeled and entered into a separate discussion area with their own numbering scheme. These APIs will be available to process participants for comment and discussion. However, the proposed API will not be formally transitioned into the API Library until the API has been agreed to, implemented and tested. At that point, the API transitions into the registration process and, after a final technical review, the process continues as shown in Figure 1 for final resolution/registration by the CMB.

In accordance with the portability and technology insertion objectives of JTRS ORD, abstract API's shall be fully defined in a platform independent language such as the Unified Modeling Language (UML). In order to accommodate the various Cluster implementations, concrete API's shall be defined in their platform specific or native language definitions.

2.2 Near Term Actions. Boeing is the Cluster 1 Integration contractor and has responsibility for 21 waveforms and the Cluster 1 hardware configurations. Additionally, there are four individual waveform contracts and two prototyping contracts for a handheld and a manpack JTRS configuration. The sharing of design documentation that deals with the definition of APIs is an essential step in the coordination of API development leading to the desired minimum set of common APIs. The above process is to facilitate a consensus on APIs among all developers at the early design phases to eliminate multiple parallel version developments. Further, distribution of all Radio Services, Radio Devices, and Radio Security Services is required in order to effectively discuss common API specification and reach Industry consensus on a set of common interfaces.

Each contractor defining APIs, either internal or external, shall post their API design to the JTRS API Discussion Area no later than the time of Software Critical Design Review. This shall be done without divulging company proprietary information. After posting, proposed APIs will be reviewed and commented upon by the registered participants in the process. After reaching consensus APIs will be registered by the CMB for use in future system development. Once registered, deviations from the standard APIs will be allowed only if justified and approved by the JTRS JPO.

2.3 Announcement. This process will be announced via email and a CBD announcement inviting participants to propose APIs for registration as described in this Application Programming Interface (API) Policy.

2.4 Further Near Term Action. All currently listed CPs proposing APIs for registration will be transitioned into the separated discussion area and labeled as described above.

Enclosure (1)