COVESA Technical Project Funding Framework Document

Introduction

COVESA is an open and member-driven global technical alliance accelerating the full potential of connected vehicles. COVESA's success is founded on member-driven, open technical approaches to many business challenges facing today's automotive industry.

Technical projects are one method COVESA uses to align member perspectives and deliver useful artifacts to the members and the broader automotive industry. Projects can produce a variety of deliverables, the most common being open source code and/or documents that describe aligned technical approaches for a given challenge.

The funds COVESA receives from membership fees and sponsorships help defray the cost of operating the alliance, executing events, and engaging vendors that provide specialty services to COVESA, such as a Community Director. After those expenses are covered, the availability of funds to pay for technical projects is often limited. In 2024, COVESA completed a member-funded technical project called Unified Push Notification (UPN). Three members were sufficiently invested in the project outcome to provide additional funding beyond their annual membership fees. This member-funded approach was deemed successful, and this document will define a repeatable framework for funding COVESA technical projects.

Success Factors of Member-Funded Projects

The success of the UPN project hinged upon three primary factors. First, the project solved a real business problem faced by multiple COVESA members. Specifically, an automotive-specific push notification approach did not exist. Providing one would alleviate the need for multiple stakeholders to build their own, potentially causing more fragmentation and confusing the very app developers they need to produce quality apps for their vehicles. Simply put, the project promised real business value to the funding members, simplifying the decision to participate in the funding.

A second success factor of the UPN project was a well-defined project deliverable based on clear requirements and expert resources. Funding members knew precisely what they would get based on the project requirements and the selection of the developer, a skilled maintainer of a current (non-automotive) push notification code base. Care was taken that the requirements document was well-defined and included milestones for delivery, review, and acceptance.

The third success factor for the UPN project was awareness of the project at all levels of the organization. Birthed in the AOSP App Framework Expert Group, the project was presented and gained consensus at the Technical Steering Team and Board of Directors levels. Awareness at the Board level generated some of the necessary funding for the project to succeed. A successful project must be highly visible within the initiating group and upward into the alliance's governance bodies.

To summarize, the UPN project succeeded because it solved a business problem faced by multiple COVESA members, it was well defined with both requirements and expert resourcing, and it enjoyed the necessary visibility at both technical and governance levels.

Technical Project Framework

Member-funded technical projects must travel through three phases:

- Pre-project phase
- Project Execution Phase
- Project Completion Phase

Pre-Project Phase

The success of most projects depends on the care taken during the pre-project phase. During this phase, three questions must be answered:

- What will the project produce and why?
- How will the project be executed?
- Who will do the work?

Project Definition

The first step during the pre-project phase is defining the project. This normally begins in the context of an existing group with a one-page description highlighting the business problem and the value of solving it within COVESA. It continues, with supporting stakeholders including a project leader, and finishes with a rough estimate of time and resourcing required. Starting with a simple one-page project description helps flesh out the project's business value, which is essential to its success. It also provides a document that can be sent to targeted stakeholders for input and verification, resulting in an intent to support.

When a minimum of three COVESA members validate the business purpose and express an intent to support the project, then the project should be presented to the full group for consensus. Upon receiving group consensus, presenting to the Technical Steering Team for consensus is an optional next step.

Project Scope of Work

Having received consensus within the group, the next step is to produce a statement of work document for the project. The scope of work is necessary to provide the project details to prospective funding members and potential vendors.

A COVESA scope of work document should have the following information:

- Restatement of project purpose, including business value to COVESA (Why)
    - This can be copied from the pre-project document
- Detailed Requirements Definition (What)
    - Sufficient specificity for vendors to provide accurate quotes and for stakeholders to understand what they are getting
- Existing Starting Point(s) (How)
    - This could include an existing code base to be extended or a reference document published elsewhere
- Governing Project License(s)
    - It should reflect COVESA's open licensing policy
- Timeline including intermediate milestones (When)
    - Timelines will be communicated to governing bodies and are expected to be adhered to
- Acceptance Criteria
    - Objective criteria for when the project is completed
- Project Oversight (Who)
    - This should include both group/project leaders and individuals involved in managing the project and accepting its outcome

When complete, the Scope of Work document shall be reviewed and approved by the group and have visibility in the Technical Steering Team and the Board of Directors. It is recommended to approach members who may be interested in funding the project before presenting it to the Board of Directors.

Project Funding and Vendor Selection

Before proceeding to project execution, a project funding model (see Financial Considerations section) must be selected based on quotes from at least three potential vendors. Note that in limited circumstances, such as the UPN Project, when the selected vendor was uniquely qualified (as maintainer of the code base extended during the project), the Board may waive the requirement for three quotes. The project may decide on a formal or informal request for proposal process to receive at least three quotes.

Once the estimated cost of the project is known, the next step is to present the project to the Board of Directors to determine a funding approach. During some years, the Board may allocate money from its operating budget for technical projects. Based on the merit of the project and the value to COVESA members, the Board may cover all, a portion of, or none of the project costs. Project leaders must pursue member funding when the project costs cannot be fully covered by the operations budget. If project leaders need help determining sources of funding, they may approach the group leaders, the Community Director, or the Executive Director, for ideas.

When a project funding approach is determined and agreed upon by the Board, the project may proceed to award the project to a selected vendor.

Project Execution Phase

COVESA technical projects should follow typical project management best practices. Among others, these include setting and managing project milestones, establishing a cadence of progress reporting, and approving project outputs.

COVESA governance bodies (Board, TST) and the Marketing Team, responsible for communicating alliance progress, must understand how the project is progressing against defined milestones. Each COVESA technical project shall have a set of dates by which portions of the project are completed and reported. Whether these are phases or intermediate deliverables, they should be documented and used as the basis for managing and reporting project progress.

Project progress should be reported monthly to the project's parent group. Reports may also be given to the TST and Board, especially if there are blocking factors or concerns over insufficient resourcing. A monthly report shall be given to the Board when operational funds are used by the project. In a multi-phased project funded by the operations budget, the Board requires phase progress reports to determine funding for additional phases. The Community Director shall stay sufficiently informed to guide project leads on reporting to the TST or the Board. The project should use a standard project reporting template, available from the Community Director.

Based on how milestones are documented in the project, it may have a single, end-of-project approval point or multiple approval points based on phases or iterative deliverables. Either way, a project must define objective approval criteria that are understood by all involved in the project. This criterion enables all stakeholders to know when a project is completed and simplifies end-of-project reporting to funding stakeholders, including the Board.

Project Completion Phase

A project is not necessarily complete when its deliverables have been accepted. Each project should perform three steps before it can be considered complete.

First, the project should actively engage COVESA Marketing as well as funding stakeholders to encourage awareness and adoption of the project results. A successful project delivers tangible value to members and the industry. Adoption may not be experienced without proactive awareness activities and opportunities for the usage of the project output. Thus, an adoption plan should be developed and executed to deliver the project output to interested stakeholders.

Second, the project should define and communicate to funding stakeholders any expectations of ongoing work. Ongoing work may include code maintenance (bug fixing) or new feature development. Project leaders may need time to obtain this information, as bugs may not appear overnight, but they should track usage and determine how to cover the expense of ongoing maintenance.

Finally, as a fundamental best practice of project management, the project should perform an evaluation and produce a final project report. The project leaders should look at project challenges and successes and pass those on for future COVESA projects. This final report should be filed in the project repository for future reference.

Incomplete Projects

Most projects start with good intentions for completion and delivery of the expected outcome. For various reasons, some projects stall and do not meet expected milestones or deliver what was originally expected.

This raises the question of when a project should be cancelled or postponed. One limiting factor for many projects is financial or human resources. Lack of volunteer work can severely limit a project's completion and may result in the cancellation or postponement of a project. Other projects suffer "scope creep", resulting in higher financial costs or additional need for volunteer resourcing. Projects lacking resources to complete milestones should revisit the Project Definition and Vendor Selection phase to reset expectations of the project requirements and renew support from the parent group, TST, and the Board. If support cannot be renewed, then the project should be cancelled. The Community Director should collaborate with project leads to determine the appropriate course of action.

Other projects may stall due to a technological shift in the target marketplace. Projects may be started based on certain assumptions or the absence of competing solutions. If a

solution becomes available, the completion may no longer benefit COVESA's membership. In this case, the project should be cancelled or, at a minimum, proceed with a significantly reduced scope.

Dormant projects making no consistent progress toward expected milestones for 6 months are candidates for cancellation or rechartering. The Board reserves the right to cancel a project for lack of progress.

Financial Considerations

While COVESA benefits from member contributions, some COVESA technical projects will require funding to deliver the intended benefit on a reasonable schedule. Project funding can come from two primary sources.

First, the COVESA Board sets an annual budget, which may or may not include funds for technical projects. The annual budget, comprised of revenue from membership fees and event sponsorships, primarily covers recurring expenses incurred while delivering member benefits. These funds cover expenses for executive, operational, and technical leadership, as well as expenses for member meetings and other industry showcases. Expected revenue may vary from year to year, so funding from the annual budget for technical projects may not always be available. The COVESA Executive Director oversees the annual budget and could be asked to assess the availability of funds. Ultimately, the Board determines when and if a project qualifies for partial or full funding. Thus, if the budget is available, project leaders would present their funding request to the Board after having received consensus on the project requirements and the necessary resourcing experts from the parent group. If operational funding is allocated to the project, the Board may assign a Board sponsor for the project, and the project must meet the reporting guidelines set by the Board as described earlier in this document.

A second source of funding is voluntary contributions by members beyond their annual membership fees. Some members may believe that the value of having a COVESA-led, single solution is better than having each member build their own. If that is the case, then an appeal can be made to members for additional funding of a project. The most likely contributors are already engaged in the parent group (and may even be in leadership). During the consensus-building in the group, project leaders may already have an idea of whom to ask for this additional funding and have an idea of the level of contribution from each. Visibility at the Board level has also led to additional funding. Project leaders can approach the Executive Director for guidance on developing a Memorandum of Understanding (MoU) or similar document to obtain support from prospective funding

members. A template was created during the UPN Project that can be retrofitted to the new project. Once the funding members are committed, the Executive Director can request that invoices be sent to gather the funds.

One lesson learned from the UPN Project was that different funding members pay on different time windows. In a multi-phased project, this is not an issue, as later payments can be applied at the end of the project. But every effort should be made to gather the project funds as quickly as possible.

Conclusion

COVESA is committed to solving connected vehicle business problems through open technical solutions. Most often, these solutions come from the alignment of member volunteer efforts. Funded technical projects can also deliver a solution on a timely basis, with paid experts already familiar with the intended solution.

COVESA strives to fund technical projects from its annual operating budget. If this is not possible, interested COVESA members may be willing to pay a portion of the project cost from voluntary contributions beyond their annual membership fees.

The framework defined in this document gives guidance to project leaders seeking to fund a technical project. As COVESA completes additional funded projects, this document will be updated based on the lessons learned.