SAE International

SAE MOTOR VEHICLE COUNCIL POLICY

Mission

The role of the Motor Vehicle Council (MVC) is to serve industry, consumers, government, and the public by providing Technical Reports (Standards, Recommended Practices, and Information Reports) that will contribute to the improvement of the overall performance, convenience, and safety of passenger car and light truck transportation and assist in the development of vehicles, systems, and components. It is also the role of the MVC to strategically guide the development of such Technical Reports.

It is not the purpose of the Council to regulate the manufacture or use of passenger cars and light trucks, and no specifications are to be promulgated which are arbitrary or more restrictive than necessary to achieve the above purposes. No specifications should deter the manufacture or use of adequate products, although specifications may differentiate products with different levels of performance, convenience, and safety. Implementation of any Technical Reports issued by the MVC is voluntary. Enforcement is not the intent of any SAE body.

The SAE MVC, through its Committees, will actively attempt to harmonize its Technical Reports with standards of other agencies throughout the world. However, in these attempts, technical accuracy and SAE policies should be followed.

MOTOR VEHICLE COUNCIL POLICY

I. Purpose

The purpose of the SAE Motor Vehicle Council is to:

a. Develop policies, strategic direction, and MVC long term Business Plan for the standards development for the US passenger car and light trucks industry
b. Promote and oversee the activities of the Systems Groups reporting to the MVC in the area of light duty ground vehicles (passenger cars and light trucks)
c. Approve SAE Technical Reports, i.e. Standards, Recommended Practices, and Information Reports for publication by SAE International
d. Represent, as appropriate, the automotive industry on standards development issues

II. Authority

The MVC reports to the SAE Technical Standards Board (TSB) and operates in accordance with the SAE TSB Rules and Regulations. This MVC Policy is intended to expand those TSB Governance Policies, which take precedence.

Deviations from the TSB Governance Policies require specific approval of the TSB.

III. Operation

Motor Vehicle Council

General. Individuals affiliated with MVC serve in the capacity of officers or members. They are of the senior level coming from the industry, government or academia and are selected on the basis of their individual knowledge and experience in the automotive industry and/or standards development. The MVC strives to maintain balance of its membership based on the SAE TSB requirements.

Voting Members. All MVC officers and members are voting members of MVC by serving in one of the following capacities:

Chairperson of MVC
Vice-Chairperson of MVC
Member of MVC

Terms of Office. Members of the Council shall be appointed for two-year terms (start of term: January 1, end of term: December 31). Members may be re-nominated for a second consecutive two-year term. If a member is unable to complete a term on the Council, the MVC Chairperson may appoint or solicit a replacement to complete the unexpired term.

Nominations. The Chairperson of the MVC shall appoint a Nominating Committee at the first meeting of the Council each year in order to nominate for the following year new members to the Council and a new Chairperson and Vice Chairperson. These nominations shall be balloted and approved by the Council no later than May 1 of each year and solicited for the Technical Board for its approval at their spring meeting.

Membership Review. Members are expected to participate in the work of the Council. This includes

attendance at meetings and voting on letter ballots. Chairperson of MVC is responsible for periodically reviewing Committee rosters and taking such action as may be required to ensure an active and participative membership.

Records. The SAE MVC complies with the SAE TSB Records Retention Policy (see latest version of the TSB Governance Policy)

MVC Chairperson

Qualifications. The Chairperson shall have broad automotive industry experience, regulatory experience, and/or understanding of regulatory and standards development process. The Chairperson shall have experience in Committee work and understand SAE TSB Governance Policy.

Duties. Duties of the Chairperson shall include:

- Preside over MVC meetings.
- Lead the process of prioritization and harmonization of standards that support the MVC mission
- Assure that the Systems Groups and Technical Committees support the MVC mission
- Lead MVC to establishment of new System Groups and appoint their Chairpersons.
- Assign projects so as to expedite MVC's work.
- Represent MVC as a member of TSB.
- Perform other duties as required by TSB.

Term of Office. The Chairperson of the MVC must be nominated each year for approval by the TSB, but it will be normally expected that the Chairperson will serve for two consecutive years, and that the Chairperson's entire membership on the Council may be for four consecutive years. An individual may be reappointed for a second two-year term in which case the individual's entire membership on the Council could be six years.

MVC Vice-Chairperson

Qualifications. The Vice-Chairperson shall have broad automotive industry experience, regulatory experience, and/or understanding of regulatory and standards development process. The Vice-Chairperson shall have experience in Committee work and understand SAE Technical Standards Governing Policy.

Duties. The Vice-Chairperson presides over MVC meetings in the absence of the Chairperson, chairs the nominating Committee for new Council members, and assumes other duties as directed by the Chairperson.

Term of Office. The Vice-Chairperson of the MVC must be nominated each year for approval by the MVC, but it will be normally expected that the Vice-Chairperson will serve for two consecutive years, and that the Vice-Chairperson's entire membership on the Council may be for four consecutive years. An individual may be reappointed for a second two-year term in which case the individual's entire membership on the Council could be six years.

Motor Vehicle Council Meetings

Frequency. MVC will hold at least 8 meetings annually. Face-to-face meetings shall occur at least four times annually. Meeting agendas shall be issued at least 10 business days before each meeting.

Agendas. The MVC agenda should include the following elements as appropriate:

- Oral and written reports by the MVC Chairperson, normally including items of Council interest from the TSB.
- Oral and written reports by Systems Group Chairpersons or Technical Committee Chairpersons.
- Discussion of topics of concern to MVC and its Committees, including necessary action items
- Other on as needed basis as determined by the Chairperson and SAE staff.

Meeting Minutes. Draft minutes from every MVC meeting will be prepared by SAE staff, reviewed and approved by MVC.

Quorum. At least one-half of the voting members shall be present to constitute a quorum. If a quorum is not present, a scheduled meeting may still be held, but any decisions taken at such a meeting shall be subject to subsequent approval.

US TAG. Whenever feasible, the meetings of the MVC should take place in conjunction with the meetings of the TC22 US TAG.

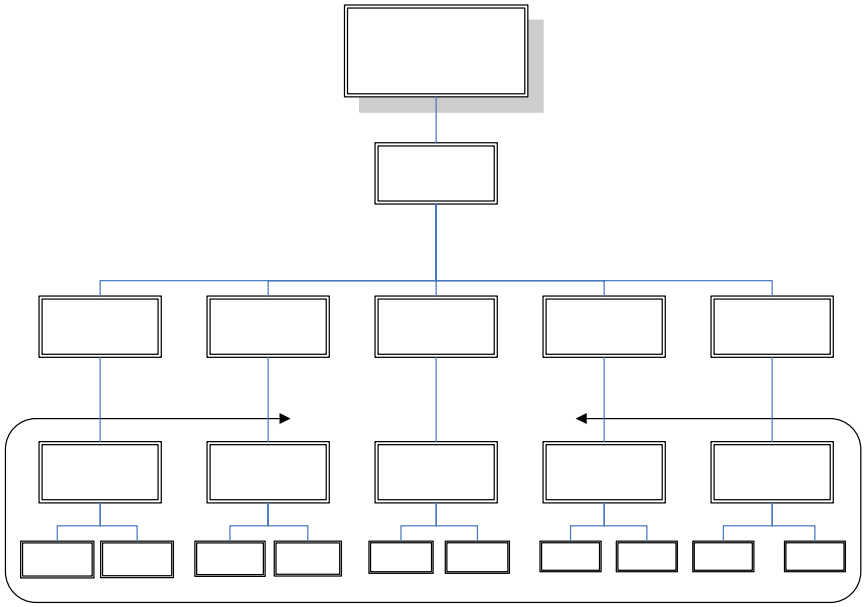
Motor Vehicle Council Job Products

Motor Vehicle Council Business Plan

Every year, the MVC will review, update and re-issue its Business Plan. The Business Plan will contain long term view on standards development in the passenger cars and light trucks area including international harmonization, prioritization of standards development in the US and globally, trends in technologies that need to be addressed by standards development, regulatory issues that need to be addressed. The Business Plan will be submitted to the TSB for its Fall meeting.

Standards Rating System

The MVC will consolidate a list of all new and revised standards published in the current calendar year and rate their benefit to the industry.



Motor Vehicle Council
Organizational Chart

Motor Vehicle Council Systems Groups

1. Systems Groups

1.1 *Purpose.* The MVC will organize Systems Groups to manage the standards* writing for major systems of a passenger car or light truck and conduct prioritized standards work for the assigned area. A system is defined as a motor vehicle major function or attribute.

1.2 *Membership*. Each System Group will have a Chairperson and nominally four to six members. The members will be approved annually by the System Group Chairperson and the MVC. Systems Groups will strive to maintain balance of its membership base on TSB requirements.

The Chairperson will be appointed by the MVC for a two-year term to coincide with terms of the Council. The Chairperson may serve up to two consecutive terms and should have a broad technical knowledge of his/her assigned group.

The System Group members should be technically knowledgeable in their respective areas. They should have experience working with SAE Technical Committees and understand the standards development process well. Members will serve two years with additional two-year terms possible.

1.3 *Function.* The System Groups will meet as required, anticipated to be several times per year, to perform the following functions and report their findings to the MVC on a regular basis.

- Prioritize, and establish a list of projects that will be needed in the coming five or more years based on gap analysis.
- Regularly review with responsible Committee Chairpeople the status of all standards projects underway, including the timetable established by the Committees for each project.
- Review project listings of other Systems Groups to look for potential overlap or conflict.
- Review the membership lists of Standards Committees to assure that proper balance of producers, users, and other affected groups are represented on Technical Committee.
- Identify and address current and potential (where feasible) Intellectual Property issues immediately and with respective Committee Chairperson

1.4 *Authority.* The System Groups are responsible for establishing new Technical Committees, dissolving existing Committees, providing second level balloting, and assisting Committees in problem resolution.

2. Technical Committees

2.1 *Purpose.* SAE Technical Committees are established by approval of a Systems Group or the MVC to develop, revise, and cancel SAE Technical Standards, Recommended Practices and Information Reports within their Committee scope.

2.2 *General.* An SAE Technical Committee will function in compliance with the SAE By-Laws, SAE TSB Governance Policy and these MVC Policies. All SAE Technical Committee members will act in good faith to promote SAE' standards development program.

2.3 *Membership.* Overall Technical Committee membership shall attempt to attain an equitable balance of representation by knowledgeable interested persons so as to provide a competent

* Standards – Recommended Practices, Information Reports and Standards

and authoritative Committee. In considering the equitable balance of a Committee, the individual's point of view as a producer, user or consumer shall be considered.

2.4 *Function*. Technical Committees shall be responsible for one or more Technical Reports which are closely related in scope. Technical Committees may be organized to review other documents such as Military Standards, ISO Reports or provide a US position to the international development process.

2.5 *Term*. Technical Committees who fail to meet for a period of 12 months will be declared inactive and subject to an appropriate System Group's review to abolish.

2.6 *Committee Officers*. Committee Officers are elected by the voting members of their Committees to serve one-year term of office. The Chairperson may be re-elected to a second one-year term; service beyond three consecutive years is subject to approval by majority vote of MVC. It is mandatory that a Vice-Chairperson be elected to assist the Committee Chairperson and a Secretary to take minutes.

2.7 *Committee Chairperson. Responsibilities.*
The Chairperson of an SAE Technical Committee is responsible for the overall management of that Committee, including any Working Groups and Task Forces. He/she will inform the Systems Groups of important standards development issues related to the work of that Committee and:

- Ensure that his/her Committee functions in conformance with TSB Governance Policy and these MVC Policies
- Act in a neutral capacity
- Address any potential Intellectual Property issues with assistance of SAE staff
- Ensure that all points of view are adequately expressed at meetings
- Action items are properly recorded in the meeting minutes and then followed up

2.8 *New Committees*. New Committees may be formed as necessary to carry out specific technical segments of the MVC scope. The Chairperson of the Technical Committee under MVC must be nominated each year for approval by the members of the Committee, but it will be normally expected that the Chairperson will serve for two consecutive years. The appointed Chairperson selects and appoints qualified individuals to serve as initial members of the new Committee.

3. **Working Groups.** Technical Committees may establish Working Groups for specific assignments. A Working Group shall report to its parent Technical Committee through a Working Group Chairperson appointed by the parent Committee *(see 2.7 for Working Group Chairperson's responsibilities)*.
A Working Group comprises of a restricted number of individually appointed experts brought together to deal with the specific task allocated to the Working Group. It is recommended that Working Groups be reasonably limited in size. The Technical Committee may therefore decide upon the total number of experts.

4. **Task Forces.** Technical Committees may establish Task Forces, the purpose of which is to study a precisely defined problem on which the Task Force reports to its parent Committee at the same meeting or, at the latest, at the next meeting through a Task Force Chairperson appointed by the parent Committee *(see 2.7 for Working Group Chairperson's responsibilities)*. The membership of a Task Force shall be chosen from the members present at the meeting of the parent Committee. A Task Force shall be automatically disbanded at the meeting in which it has presented its report.

IV. Standards Development and Approval

Development Process.

Table 1 shows the sequence of stages through which the technical work is developed.

Stage	SAE Technical Reports	
	Name	**Responsible/Approval**
1 Proposal stage	New work item proposal	SAE Committee/Systems Group
2 Committee stage	Committee working draft	SAE Committee, Working Group
3 Balloting – 1st level	Committee draft	SAE Committee, Working Group
4 Balloting – 2nd stage	Committee draft	MVC
5 Publication stage	SAE Standard	SAE staff

Table 1

1. *Timeline*. When a project to develop, revise, reaffirm or cancel a document is started, the Standards Committee will establish a timetable for completion of the project. The timetable shall include milestones such as draft completion, first and second ballot.

2. *Sponsor*. Each Committee will identify document sponsor who will be ultimately responsible for management and development of the standard, recommended practice or information report.

3. *Intellectual Property*. The work contained in the SAE technical documents is the property of SAE International. In cases where harmonization process and standards development work involves domestic and international organizations who request access or usage rights to SAE standards, it is the MVC Policy to strictly follow the Intellectual Property policy of the SAE TSB and SAE International.

4. *Scope.* Every Technical Report of the MVC should have a scope which clearly defines the area of application of the standard, recommended practice, or Information report. In the case of test procedures, the scope should specify exactly the function which is being tested. The capabilities and limitations should be clearly included in a given report and the report should include both the overall function of the product and the separate functions corresponding to each individual test.

5. *Preparation of Technical Reports*. MVC Technical Committees shall prepare SAE Technical Reports on topics covered by their scopes and periodically review existing SAE Technical Reports.

6. *Balloting of Technical Reports.* Following receipt of a draft Technical Report from a document sponsor or Committee Chairman, SAE staff shall post draft report to the designated Committee. The draft report shall include a rationale statement and a summary of responses from previous ballots. Every ballot will contain an executive summary of the intent of the change, a listing of the Technical Committee members who participated and/or voted on the ballot, and indication in the balloted document what changes have been made. SAE staff shall tally results of ballots and report results to the document sponsor and Committee Chairperson. Results of MVC ballots shall also be reported to the Council Chairperson.

7. Approval Criteria. The following criteria shall be met for approval of a draft Technical Report at each stage of the process (Sub-Committee, Technical Committee, MVC): 50% response from voting members (response means a ballot marked approve, disapprove or waive) and 66% approval from voting members who vote approve or disapprove.

8. *Resolution of Ballot Comments*. The document sponsor should attempt to obtain unanimous approval by resolving all comments. Unresolved disapproval comments shall be documented and forwarded to the next voting level.

9. *Initiation of Technical Reports*. Work in a Committee on an Information Report, Recommended Practice, or Standard may be initiated upon suggestion from anyone, based on a perceived present or anticipated need, a significant number of current or expected users, or an emerging or rooted state-of-the-art in some area relevant to the Committee's expertise. The MVC may expand the charter of a Committee or form a new Committee in areas of need which are not covered by the expertise of current Committees.

Relationship with outside organizations

1. *Liaison*. The MVC is responsible for maintaining an effective liaison with ISO/TC 22 (Road Vehicles) through the TC 22 US TAG.

2. *US TAGs.* The MVC will ensure that an effective system of Technical Advisory Groups (TAG's) is formed by the MVC's System Groups to cover all the activities of the various Subcommittees and Working Groups of ISO/TC 22.

3. *US regulatory agencies.* The MVC will invite the regulatory agencies, affecting or affected by SAE Standards development, to participate in the relevant meetings of the Council as appropriate.

Relationships with Other SAE Councils

1. *Interaction between Councils and between Committees.* In technical areas where activities within the MVC's jurisdiction overlap the activities in other SAE Councils, close liaison should be maintained between the Councils and their Committees, and Technical Reports developed within the Committees should be jointly approved by all Councils involved.

2. *Tasks performed for other Councils.* It is also appropriate for Committees of the MVC to perform tasks for other SAE Councils when approved by the MVC.

Annex

MOTOR VEHICLE TECHNICAL REPORTS – Definitions and Guidelines

Technical Reports

1. *Purposes of a Technical Report.* MVC Technical Reports are intended to:

    a) Be educational by instructing the technically-trained reader in an area of automotive engineering which is not covered in standard textbooks.

    b) Define terms in areas in where a common terminology will aid communication among technically-trained people.

    c) Recommend prevailing practices and/or procedures for testing automotive products or for carrying out processes related to automotive engineering.

    d) Specify standards which will define the function and/or performance level of automotive products or assure the compatibility or interchangeability of automotive components when used in systems.

    In all cases, MVC Technical Reports should be written in such manner that technically-trained people not necessarily in the subject specialized field, can understand the report. Thus the report should be understandable, not just to manufacturers, but also to technically-trained consumers, government agency personnel, and members of the general public.

    In MVC matters, the term "users" refers both to engineer users of the Technical Report and to users of the product or process described in the report. Care should be taken to distinguish which meaning is intended when the term is applied.

Information Reports, Recommended Practices, and Standards

1. *Information Reports* are intended to be educational, conveying general information about a particular area of passenger car and light truck automotive engineering. Defining nomenclature or classifying components and systems are typical examples. Information Reports normally contain no design or performance specifications or test procedures.

2. *Recommended Practices and Standards* are SAE reports in which specifications of one type or another are included: design specifications, test procedures, or performance levels. The distinction between a Recommended Practice and a Standard is one of supporting substance.

    a) Standard is an engineering practice or specification which is completely described, has extensive engineering evidence to support it, is broadly accepted, and is not expected to change for several years.

    b) Recommended Practice is tentative in that it may not cover all aspects of the product, process, or procedure; it has good evidence supporting it, but it may not yet be broadly accepted.

3. Recommendations as to whether Technical Reports are to be issued as Information Reports, Recommended Practices, or Standards should be made by the Committees for approval by the MVC.

Design, Test Procedure, and Performance Specifications

The purpose for specifications in any SAE MVC report must be clearly indicated in the report itself. "Purpose," is to indicate the function that will be fulfilled or the objective that will be met if the specifications are compiled with. The evidence that compliance will ensure fulfilling the function or meeting the objective need not appear in the report itself, but must exist and be referenced in the rationale which accompanies the report when it is sent to the MVC for approval of the extent and completeness of classification.

1. *Design specifications* may be intended only to ensure that products from different manufacturers may be used interchangeably. In such a case, that purpose should be indicated in the Technical Report. Design specifications intended to ensure performance of some function should be avoided since this would be unnecessarily restrictive; they should be replaced by performance specifications. Design specifications are intended to assure compatibility and interchangeability of components when used in systems and should not be used to control or ensure performance. Design guidelines are permissible as an aid to manufacturers in producing an expected performance level, but it should be clearly indicated that these are not specifications.

2. *Test Procedure.* The purpose of test procedures is the measurement of some function, and this function should be identified in the Technical Report. The conditions specified for a test (temperatures, pressures, configurations, etc.) are often intended to simulate some normal - use condition, and if so that use should be defined. If the test procedure concluded with a pass/fail determination, then the conditions of test justified in the rationale for the report

3. *Performance specifications* must be fully justified in the rationale accompanying the Technical Report when it is sent to the MVC for approval. This means there must be good, publicly-available evidence that complying with the specifications will ensure that a well-defined function will be fulfilled and non-compliance will not fulfill that function.

   Performance specifications should be separated from test procedures, preferably in a separate report, but at least in a separate section if in the same report.

   A rationale (technical justification) must be provided for every performance specification, either published in the report itself, in a separate Information Report, in a separate technical paper, and/or referenced in a rationale submitted with the Technical Report to the Council when balloted, and then retained in the report file.
   Several types of performance specifications are typical of SAE Recommended Practices and Standards.

   a) Minimum (or maximum) specifications are applicable to test for which a single performance level is required in order for the product to fulfill its function and thus "conform." It is presumed that this level of performance is adequate for the function, and no other performance level is of interest. Lower (or higher) performance levels are unsatisfactory, and higher (or lower) levels have no additional benefits. Ratings describe the performance of products under a series of differing operating conditions or design configurations. In essence, they define different levels of performance users of the Technical Report for different purposes. A given level of performance may be adequate for one user but not for another.

   In all cases, a Technical Report containing performance specifications should clearly indicate the significance of the performance levels relative to the function the product is intended to perform.

   Performance specifications should be definite and not include tolerances, since they are intended to represent adequate performance of a function. Measurement accuracy is a test procedure

matter, and variations in product performance are matters for the users of the Technical Reports, not the SAE MVC which may be of interest to different users of the Technical Report for different purposes. A given level of performance may be adequate for one user but not for another.

b) Description performance specifications or performance ratings describe the performance of products under a series of differing operating conditions of design configurations. In essence, they define different levels of performance which may be of interest to different

In some cases, "good evidence" may simply be that the combined experience of the Committee preparing the report indicates that the function is adequately fulfilled with this performance level. In this latter case, a Recommended Practice is more appropriate that a Standard.

It is often desirable to define several levels of performance specifications, in turn, defining several different grades, classes, or types of functions fulfilled. Such specifications constitute "performance ratings."

Terms: "safe" or "unsafe" operation are not to be used in Technical Reports since these functions cannot be defined objectively.

Systems/Components

Technical Reports ideally should be useful to manufacturers, consumers, government, and the public. However, the needs of these various groups often differ. Consumers and the public are most often concerned with the complete systems and may have little interest in the design or performance of individual components. On the other, some manufacturers and government agencies often have no control or particular components of a system. In the latter case, when components must be dealt with by themselves, it is the policy of the MVC to consider them, as far as possible, in the same configuration and environment in which they will be normally operated. This means that the function which is expected of the component described by the Technical Report must be exactly defined in the report so that the user of the report will not be misled when the component is incorporated into a system. Any systems factors required to ensure the specified function and performance must also be specified

Optional Equipment

The performance specifications for a system may not require components specified in the Technical Report as optional. However, such components may have design or performance specifications of their own related to the specific function they are intended to fulfill, and in such instances, their performance should be considered in the same configuration and environment in which they will be normally operated.

Manufacturing Tolerances

A production tolerance is an allowed variation in design or in performance of a device or system which may result from variations in manufacturing processes. Production tolerances often require consideration in the case of design specifications where interchangeability of units from different manufacturers is concerned. Design guidelines are also acceptable when they might assist a manufacturer to meet specified performance levels.

However, production tolerances are not appropriate with respect to performance specifications in Technical Reports of the MVC. Performance specifications are intended to define performance levels of a specific function and, as such, must apply to each and every component or system described. To what extent a manufacturer meets those performance specifications is a matter to be determined by the manufacturer and his customer or the manufacturer and a government agency. One client may be

satisfied with a different percentage of the items meeting the SAE performance specification than another may require.
This is consistent with the voluntary use of SAE Technical Reports in any way the manufacturers, consumers, government agencies, or public find helpful.

Reports for Government Use

Development of SAE MVC Technical Reports may be requested by government agencies to accommodate government needs whenever SAE TSB and MVC Policies and technical accuracy are not compromised. The SAE MVC will not adopt government performance levels, which are not validated and technically supported by a rationale developed within SAE's Technical Committee structure.