# Responsibilities of the LaRC Software Engineering Process Group (SEPG)

### Facilitate Software Process Improvement (SPI) Throughout the Organization

The SEPG, with CEB oversight, develops and implements the Center Plan for LaRC Software Process Improvement which defines the major SPI initiative activities and is updated annually. The plan is also submitted to Headquarters (HQ) Office of Chief Engineer’s (OCE). Under this plan, the SEPG will facilitate software process baselines, which will provide a foundation that defines existing capabilities and against which improvement activities can be planned. The SEPG will support OCE software process improvement initiative and participate in reviews of requirements and standards. The SEPG, with the help of the LaRC Chief Engineers Board (CEB), champions the SPI initiative across the Center and obtains and maintain management backing for the initiative at all levels and across all LaRC software domains.

### Provide Process Consultation

The SEPG supports LaRC line managers and development projects by providing consultation when requested and one-on-one mentoring on software engineering. It also works closely with the line managers and projects to provide guidance and support when improvement activities are being introduced (e.g. pursuing capability maturity model compliance).

### Tracks and Reports SPI Initiative Progress

The SEPG monitors all the SPI initiative activities against the Center Plan for LaRC Software Process Improvement and reports their status, and accomplishments to the CEB and HQ OCE, elevates risks or problems and proposes mitigation actions. Additionally, the SEPG evaluates all approved tailoring, waivers, submitted comments against the LMS 7150.2 software procedures, and collected metrics in order to identify improvement areas and gain a better understanding of the state of software engineering at LaRC. The group reports the results and makes recommendations to the CEB and HQ OCE based on the results of the evaluation.

### Serve as Focal Point for Software Engineering Learning

Yearly, the SEPG will gather a list of LaRC software engineering training requests, prioritize and submit them to the HQ OCE ‘Training Call’ and to the Branch Head of Collaboration, Talent Development & Recognition Branch; advertise upcoming NASA software training opportunities on @LaRC and through the SEPG email alias; provide education in software engineering and subjects related to the Center Plan. From the LaRC Software Process Improvement Initiative Web site (<https://sites-e.larc.nasa.gov/sweng/>), the SEPG will maintain and disseminate training calendars, examples, checklists, guidance, templates, tool recommendations, lessons learned, best practices, and other results from the SPI initiative.

### Facilitate the implementation of the LMS 7150 software procedures

Provide guidance, training, and mentoring on the LMS 7150 software procedures to facilitate engineering improvements and compliance. Make recommendations to their respective Directorate Heads (i.e., the Technical Authority for the organizations) on the disposition of software tailoring or waivers to the LMS 7150 software procedures and as subject matter experts on the procedures provide mentoring to their respective directorates. Review contractual agreements containing software to facilitate compliance with LMS 7150 software procedures. Maintain the LMS 7150 software procedures so that they remain in compliance with NPR 7150.2 NASA Software Engineering Requirements.

## Software Engineering Process Group (SEPG) Chair Responsibilities

1. Manage the Center Plan for LaRC Software Process Improvement and coordinate the SEPG activities.
2. Provides status briefings to the CEB, Software Working Group, and the HQ OCE, and Line Management of organizations involved in SPI activities.
3. Makes available to the CEB copies of approved tailoring/waivers against the LMS software procedures that are sent to HQ OCE along with the collective evaluation.
4. LaRC representative to the Agency-wide Software Engineering Working Group chartered by HQ OCE.
5. Act as liaison between the CEB and SEPG and between the Agency Software Working Group (SWG) and the SEPG.