Laser Purchase Procedure

1. Purpose

The purpose of this procedure is to detail the process for Principal Investigators (PI) or Center Directors, Laboratory Equipment Maintenance (LEM), Research Infrastructure Strategy and Planning (RISP), and the Laser Safety Officer (LSO) regarding the acquisition/purchase of Class 3B and/or Class 4 laser systems, as well as equipment containing embedded Class 3B and/or Class 4 laser systems.

2. Scope

This procedure applies to all KAUST research spaces (i.e. this does not apply to the KAUST Research and Technology Park) where Class 3B/4 lasers and/or equipment containing embedded Class 3B/4 laser systems are planned to be purchased.

3. Definitions

ASEPC	Academic Space, Equipment and Planning Committee. The committee is responsible for allocating space as well as approving, funding and managing equipment (with a total cost, including equipment price, taxes and shipment, equal or exceeding $20K) to the entire KAUST research community.
CDRH	Center for Devices and Radiological Health is a branch of the U.S. Department of Health and Human Services that is responsible for regulating laser devices in the USA. The CDRH classifies lasers in different categories from Class 1 (low hazard) to Class 4 (high hazard).
Embedded laser	A device containing a Class 3B or Class 4 laser system that is enclosed in a protective housing and whereby the accessible laser emission from the laser is limited via the use of engineering controls. The classification of the whole device (when all engineering controls are in place) is lower than the laser class enclosed in the device (i.e. lower than Class 3B or Class 4 laser system).
IEC	International Electrotechnical Commission is the international standards and conformity assessment body for all fields of electrotechnology, including lasers. The commission prepares and publishes international standards for all electrical, electronic and related technologies. The IEC document 60825-1 is the primary standard that outlines the safety of laser products.
LEM	Lab Equipment Maintenance team partners with the researcher to deliver expert technical support and maintenance of critical research instrumentation. As a result, LEM must be informed of the equipment maintenance regime before its purchase.
LSO	Laser Safety Officer is a Lab Safety Specialist who is responsible for the university's compliance with the standards for safe use of lasers in research.

PI	Principal Investigator is the person that oversees the research project involving the use of lasers and that is responsible for the purchase of such equipment.
RISP	Research Infrastructure Strategy and Planning team reviews and assesses all capital equipment proposals prior to ASEPC's approval. This office overseas the implementation of the committee's decisions and works closely with the Research Asset Support team for the KAUST research community.

4. Procedure for Purchase

Due to fixed asset management, laser devices can be purchased in the following 2 ways:

- Total cost for equipment, shipment and other associated cost (e.g. taxes, import etc.) is below $20K
- Total cost for equipment, shipment and other associated cost (e.g. taxes, import etc.) is equal or in excess of $20K

It is the Principal Investigator's or Center Director's responsibility to ensure that the correct procedure is followed.

4.1 Total cost for equipment, shipment and other associated cost is below $20K

Step 1:	PI/Center Director creates a shopping cart on the procurement portal system. Once, the order is placed, the procurement system requests approval from the LEM team. The PI/Center Director must also inform the LSO via email of the purchase.
Step 2:	LEM team forwards the information to the LSO.
Step 3:	LEM and LSO review the information from the shopping cart; they check maintenance requirements, manufacturer, specifications and if the device is compliant with either CDRH or IEC. If there is insufficient information, LEM and LSO will contact the PI/Center Director.
Step 4:	LSO sends an email to LEM with recommendations for the purchase.
Step 5a:	If the purchase is recommended, LEM clears the shopping cart on the procurement system as per their procedure.
Step 5b:	If the purchase is not recommended (e.g. it is not CDRH or IEC compliant or other reasons), LEM rejects the shopping cart on the procurement system and provides a justification on the system.
Step 5c:	LEM and LSO contact the PI/Center Director to discuss the reasons for rejection and assist the PI/Center Director to find an alternative solution.

Once the purchase has been cleared on the procurement system, the standard procurement procedure will follow.

PI/Center Directors are encouraged to contact and inform of the planned purchase LEM and the LSO before a shopping cart is raised. In the event there are issues regarding the proposed purchase, these can be solved before the process is started.

Note that shopping carts with value of less than $500 against a cost center get automatically approved by the system and it is the responsibility of the PI/Center Director to inform the LSO and LEM of the purchase of a Class 3B/4 lasers or equipment containing embedded Class 3B/4 laser system.

For equipment cost below $20K as defined in this section, the purchase process is summarized in Figure 1.

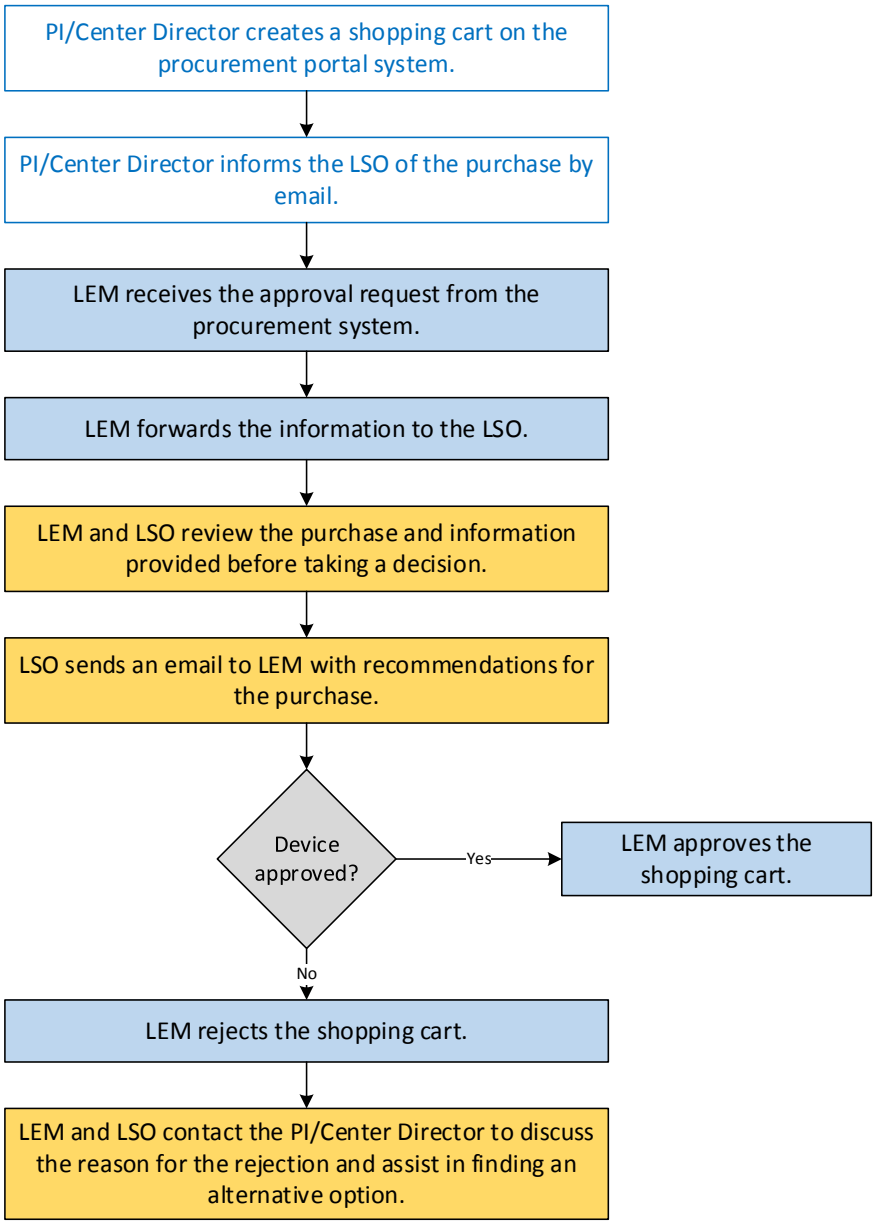

Figure 1. Purchase request process for equipment whose cost are below to $20K.

4.2 For equipment, shipment and other associated cost equal or in excess of $20K,

Step 1:	LEM receives the Funding Proposal for Scientific Equipment for review. If the proposal includes the purchase request for Class 3B/4 lasers or equipment containing embedded Class 3B/4 lasers system, LEM forwards it to the LSO.
Step 2:	LSO and LEM review the proposal. LEM checks the device manufacturer (if the device is from a preferred manufacturer or not), maintenance regime, etc. LSO checks that the device is CDRH and/or IEC compliant, and that the laboratory has all the safety features required for the use of the device.
Step 3:	LEM completes the section regarding the maintenance strategy on the proposal and includes that the purchase is cleared by the LSO. If additional safety measures need to be in place, the LSO may add additional information in a separate document that will be attached to the ASEPC form. The proposal is then returned to the PI/Center Director.
Step 4:	PI/Center Director forwards the application to Engineering and Project Management (E&PM) team (if necessary) and then ASEPC.
Step 5:	ASEPC reviews the application.
Step 6a:	If the application has been approved, RISP raises a shopping cart on the Procurement System.
Step 6b:	If the application is rejected, RISP informs the PI/Center Director as well as the LSO.
Step 7a:	If the application has been approved, Procurement issues a Purchase Order and informs RISP.
Step 7b:	RISP informs the LSO that the proposal was approved by ASEPC and sends a copy of the Purchase Order to the LSO.
Step 8:	If the proposal has been approved, LSO contact the PI/Center Director (and copy LEM) to obtain more information on possible delivery date and discuss the registration process.

For equipment cost equal or in excess of $20K, the proposal review process is summarized in Figure 2.

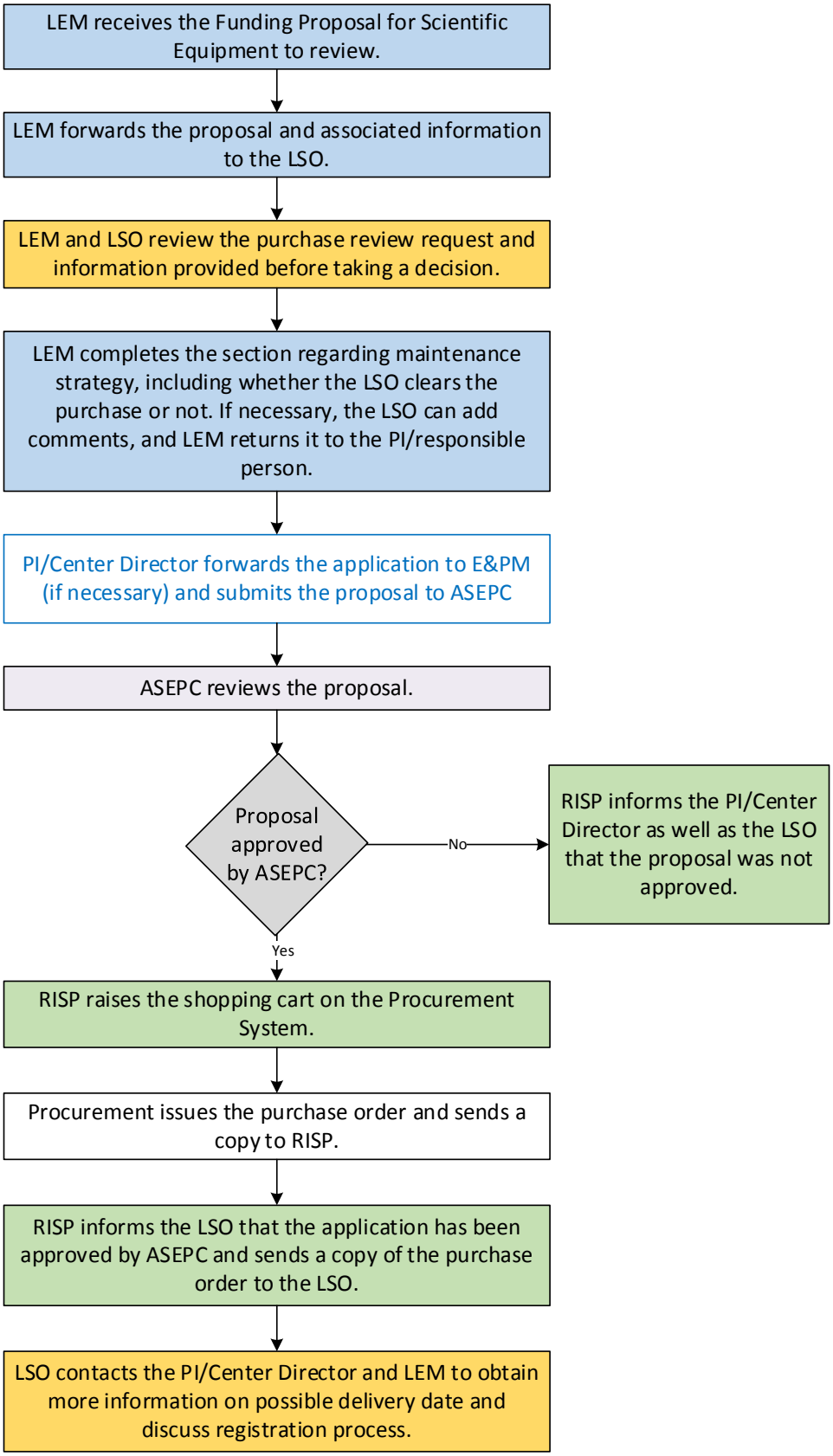

Figure 2. Purchase request process for equipment whose cost is equal or exceeds $20K.

Document History

REV	DATE	PREPARED BY	DESCRIPTION
01	Mar. 2020	D. Darios	New document