International Committee on Ultra-High Intensity Lasers (ICUIL)

Standing Committee under IUPAP
Terms of Reference (Draft 260830)

FOREWORD

The International Committee on Ultra-High Intensity Lasers (ICUIL) was established in 2003 as an IUPAP Working Group, following its origins in the OECD Global Science Forum activities on compact high-intensity short-pulse lasers. Since then, ICUIL has played a central role in facilitating global coordination among leading ultra-high intensity laser facilities and their user communities.

Ultra-high intensity laser science has matured into a long-term, globally distributed enterprise involving multi-decade facility roadmaps, major international infrastructures (*e.g.*, multi-petawatt and exawatt-class systems), and large transnational user communities. The scale, duration, and strategic importance of these activities motivate the transition of ICUIL from a Working Group to a Standing Committee under IUPAP Commission C17 (Laser Physics and Photonics), with close links to Commissions C16 (Plasma Physics) and C15 (Atomic, Molecular, and Optical Physics).

This document defines the mandate, structure, and operational procedures of ICUIL as a Standing Committee.

□

1. MANDATE

ICUIL is a Standing Committee under IUPAP Commission C17 (Laser Physics and Photonics), operating in close collaboration with C17 and maintaining strong links with C16 and C15.

ICUIL's mandate is:

- to promote international collaboration in all phases of the development, construction, operation, and scientific applications of ultra-high intensity laser facilities.
- to provide a global forum for discussion among laboratory directors, facility representatives, and user communities regarding future facilities, technology roadmaps, and emerging scientific opportunities.
- to facilitate the exchange of enabling technologies, technical expertise, and best practices relevant to next-generation ultra-high-intensity laser systems.
- to facilitate international access to major facilities and promote equitable global participation.
- to foster education, training, and engagement of early-career scientists in high-field science.

- to strengthen synergies between ultra-high intensity laser science and related fields, including accelerator physics, high-energy density science, plasma physics, nuclear physics, astrophysics, and free-electron laser science.

ICUIL acts as a facilitator and coordinating body for the global ultra-high intensity laser community.

2. MEMBERSHIP

2.1 Composition

ICUIL consists of:

- Board (5 members):
  - Chair
  - Two Co-Chairs
  - Secretary
  - Treasurer
- Members at Large (up to 12 members)

The Board and Members at Large together constitute the ICUIL General Assembly (GA). The GA is the full voting body of ICUIL and has authority over major decisions, including membership, Board appointments, amendments to the Terms of Reference, strategic priorities, and other matters specified in these Terms of Reference.

The total voting membership is typically 17 members, reflecting the current structure defined in the ICUIL Charter, subject to future adjustment with IUPAP approval. ICUIL may also welcome Associate Members and Emeritus Members, who may participate in ICUIL activities but do not have voting rights.

Membership includes representation from:

- Major ultra-high intensity laser laboratories (Laboratory Representatives)
- User communities (User Representatives)
- Partner scientific communities with strong links to ultra-high intensity laser science (Partner Representatives)

ICUIL aims to ensure among its memberships:

- Geographic balance (Americas, Europe, Asia-Pacific, and emerging regions)
- Gender balance and diversity
- Representation from developing countries
- Inclusion of both facility leadership and active scientific users

2.2 Nomination and Appointment

- ICUIL may maintain a pool of potential candidates for Members at Large, nominated as Associate Members.
- When the Board is notified of a vacancy of a Member at Large, the Board considers the balance described in 2.1 and nominates a candidate, whose name is put forth to the General Assembly (GA) for approval.
- The Chair of IUPAP Commission C17 (or a delegate appointed by C17) serves as an ex officio Associate Member of ICUIL.

Appointments of voting ICUIL members are subject to approval by the ICUIL GA and confirmation by IUPAP Commission C17, as applicable under IUPAP procedures.

2.3 Terms

- Generally, members serve four-year terms, renewable once.
- Terms are staggered to ensure continuity.
- The Chair serves a single term of up to four years.
- Rotation of leadership among major geographic regions is encouraged.

2.4 Reporting

The ICUIL Chair reports annually to IUPAP Commission C17 and, through it, to the Executive Committee of IUPAP.

3. MEETINGS AND DECISION-MAKING

3.1 Meetings

ICUIL holds:

- at least one in-person meeting per year (typically associated with a major international conference or the dedicated ICUIL conference).
- additional virtual meetings as needed.
- a General Assembly (GA) at least once every two years.

Executive sessions restricted to members-at-large, associate members and emeritus members may be held to address internal matters.

3.2 Quorum and Voting

- Quorum requires at least 50% of total membership and at least 50% of Board members, consistent with the Charter.
- Decisions are preferably reached by consensus.
- If consensus cannot be achieved, decisions require a simple majority of votes cast.
- Amendments to the ToR require a qualified majority (2/3 of expressed votes).

Remote participation is permitted. Members unable to attend a meeting may either designate an appropriate substitute or transfer their vote to another member, whereby each attendant may carry no more than one transferred vote.

4. BOARD AND OFFICERS

4.1 Role of the Board

The Board is the executive body of ICUIL and is responsible for:

- overseeing the biennial ICUIL conference
- implementing policy decisions of ICUIL
- coordinating Panels (formerly known as working groups)
- managing finances
- representing ICUIL externally
- preparing annual reports and strategic plans
- requesting proposals for new membership

The Board meets at least once every two months.

4.2 Chair

The Chair:

- represents ICUIL to IUPAP and the international community
- presides over ICUIL meetings and GA
- oversees strategic direction
- may delegate responsibilities to Co-Chairs

4.3 Secretary

The Secretary:

- maintains records and minutes
- oversees communications and official correspondence
- coordinates reporting to IUPAP
- is nominated and appointed according to ICUIL's internal procedures and practices

4.4 Treasurer

The Treasurer:

- oversees financial matters

- reports annually on ICUIL finances
- ensures compliance with IUPAP financial policies
- is nominated and appointed according to ICUIL's internal procedures and practices

5. PANELS (formerly known as working groups)

5.1 Establishment

ICUIL may establish Panels (formerly known within ICUIL as Working Groups) when specialized international coordination is required, including for time-limited tasks or recurring strategic functions (*e.g.*, facility mapping, prizes, outreach). A proposal to create, renew, or terminate a Panel may originate from the Board, an ICUIL member, or the community. Unless urgency requires action between GAs, establishment and termination of Panels are decided by the ICUIL GA. Where action is required between GAs, the Board may take an interim decision subject to ratification at the next GA.

Panels may address, for example:

- Facility mapping and global infrastructure coordination
- Technology roadmaps (*e.g.*, multi-PW and exawatt systems)
- Education and training initiatives
- Awards (*e.g.*, Kato Award)
- Regional networking (*e.g.*, Latin American or other emerging networks)
- Diversity and inclusion in high-field science

5.2 Composition

Panels:

- are chaired by an ICUIL member appointed by the Board (or elected by the GA), consistent with ICUIL internal procedures.
- may include external experts.

5.3 Oversight

- Panel mandates are reviewed at least annually by the Board and at each ICUIL GA meeting.
- Each Panel reports to the Board at least once per year.
- Panels may be dissolved by the ICUIL GA, or by an interim Board decision, subject to GA ratification.

6. ACTIVITIES

ICUIL activities include:

- Convening and endorsing international conferences and workshops.
- Organizing ICUIL-sponsored conferences.
- Maintaining a global map and registry of ultra-high intensity laser facilities.
- Publishing newsletters and statements.
- Promoting the education, training and active participation of the next generation of researchers in ultra-high intensity laser science and technology
- Sponsoring awards recognizing scientific excellence.
- Supporting regional initiatives aligned with ICUIL's mission.
- Maintaining a community-accessible website and social networking services.

Statements issued by ICUIL in its own name shall be subject to approval by the President of IUPAP, in accordance with IUPAP Internal Regulations, preferably upon recommendation of the Chair of IUPAP Commission C17.

7. FINANCE

ICUIL finances may include:

- Corporate sponsorships
- IUPAP support for approved activities

No ICUIL member may enter into legally binding contracts on behalf of ICUIL without prior Board authorization.

8. AMENDMENTS

Amendments to these Terms of Reference:

- may be proposed by any ICUIL member.
- require discussion at a formal meeting with a quorum.
- require approval by a 2/3 majority of expressed votes.
- are submitted for approval to the Executive Committee of IUPAP with a recommendation from IUPAP Commission C17.
- take effect at the beginning of the calendar year following approval.