

# **IEEE STANDARDS ASSOCIATION (SA) - *AN INTRODUCTION***

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RAISING THE WORLD'S STANDARDS



# ADVANCING TECHNOLOGY FOR HUMANITY

## ABOUT IEEE

- 420,000+ Members
- 160+ Countries
- 46 Technical Societies and Councils
- 1900+ Annual Conferences
- Global Humanitarian Efforts

# RAISING THE WORLD'S STANDARDS

## ABOUT IEEE SA

Developing market relevant open standards and solutions:

- Advancing global technologies and technology platforms
- Promoting innovation
- Protecting public safety, health & wellbeing
- Contributing to a sustainable future

# IEEE SA BY THE NUMBERS

**1500+**

**STANDARDS  
& PROJECTS**

**340+**

**CORPORATE  
MEMBERS**

**7500+**

**INDIVIDUAL  
MEMBERS**

**34,000+**

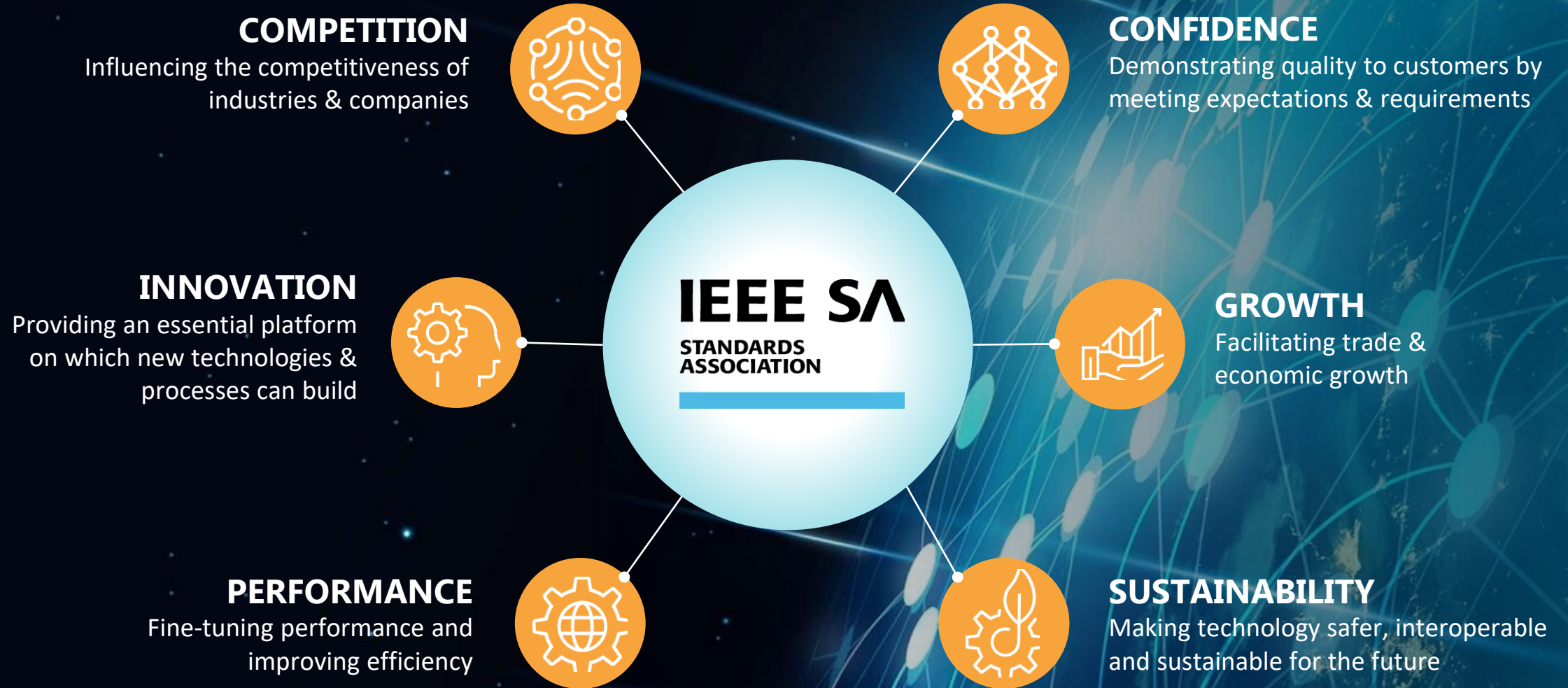
**GLOBAL PARTICIPANTS**

**180+**

**GLOBAL AGREEMENTS**



# STANDARDIZATION OUTCOMES



# PORTFOLIO OF PROGRAMS & SERVICES

RAISING THE WORLD'S STANDARDS

## Industry Connections

Exploring & incubating new tech & its use



## Standardization

Creating markets & protecting public safety through standards development



## Membership

Connecting to experts & resources with advanced participation options



## Conformity Assessment

Providing confidence & assurance & accelerating market adoption

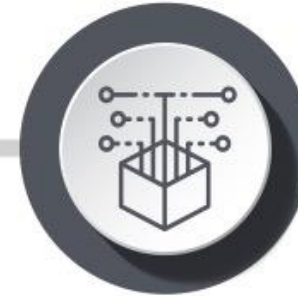


# IEEE SA

STANDARDS ASSOCIATION

## Open Source

Providing a community-powered platform to support open source projects



## Alliance Management

Providing support to alliances & trade associations

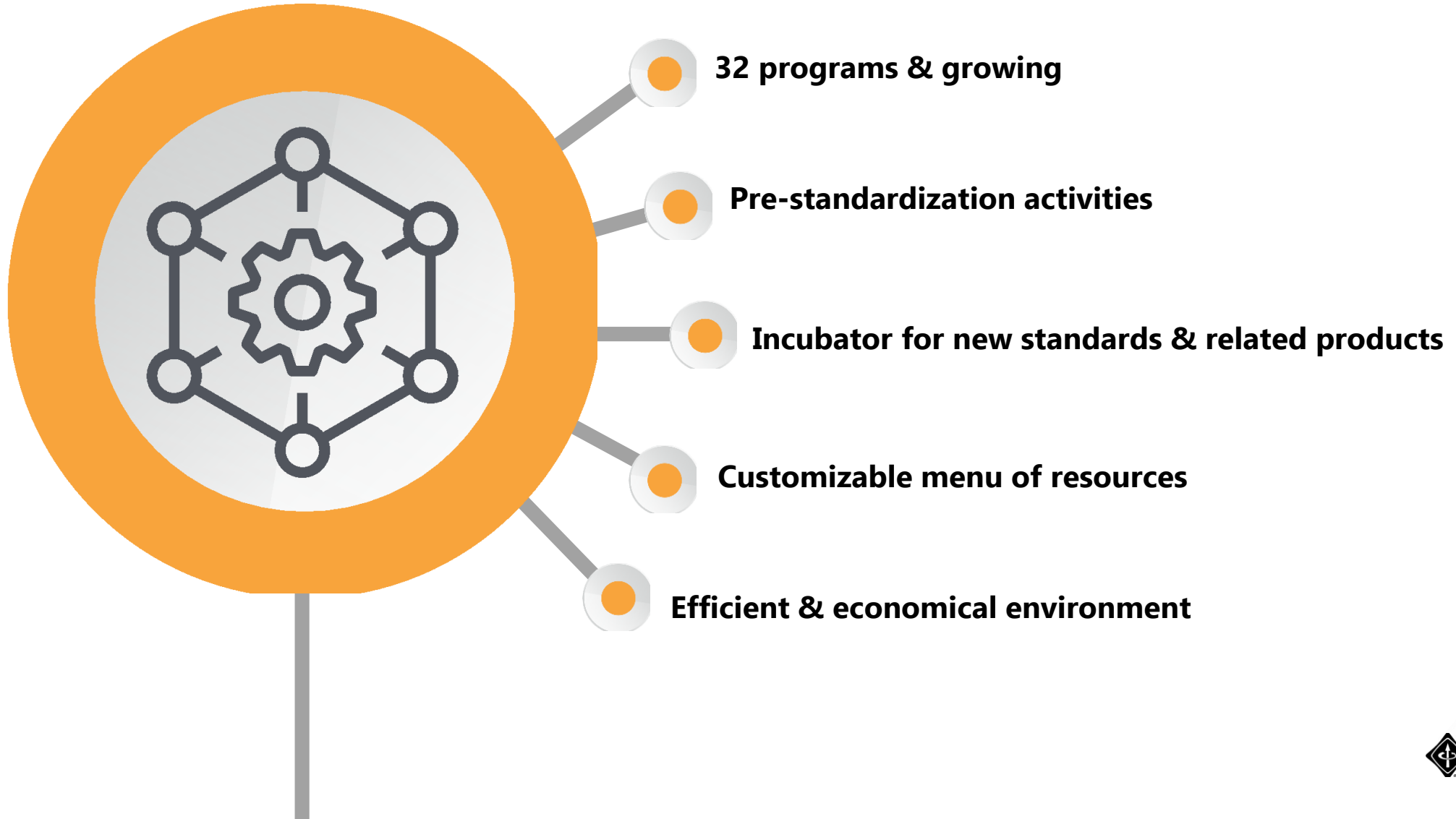


## Registries

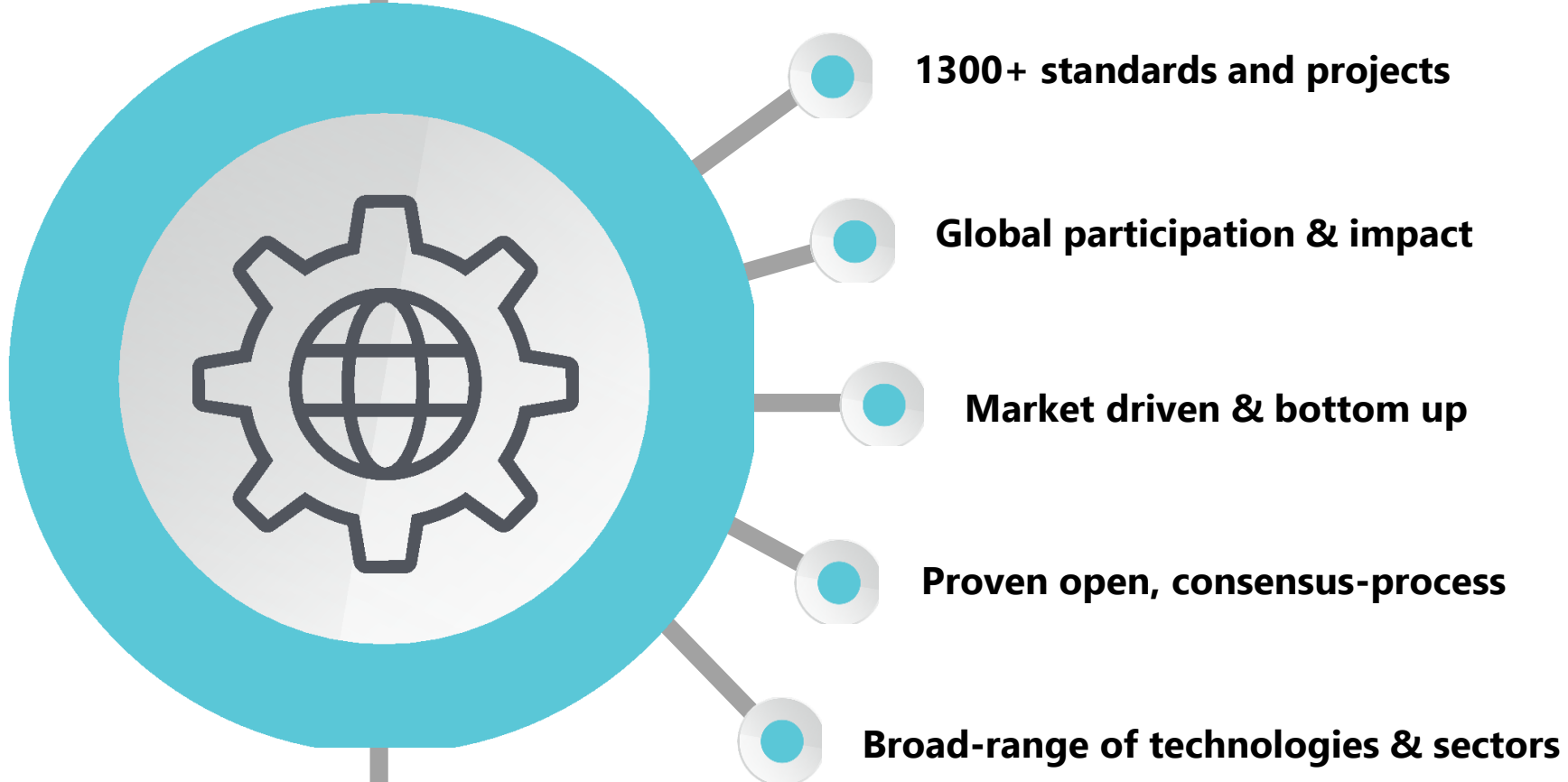
Providing unique identifiers to support global compatibility & interoperability



# INDUSTRY CONNECTIONS

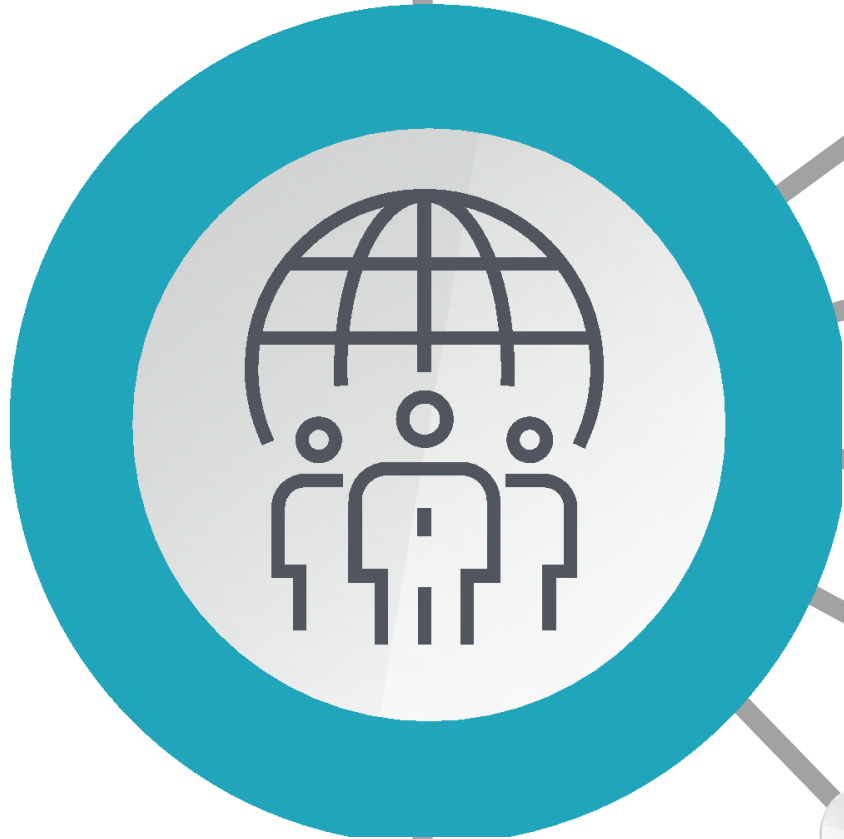


# STANDARDIZATION





# MEMBERSHIP



**340+ corporate members**

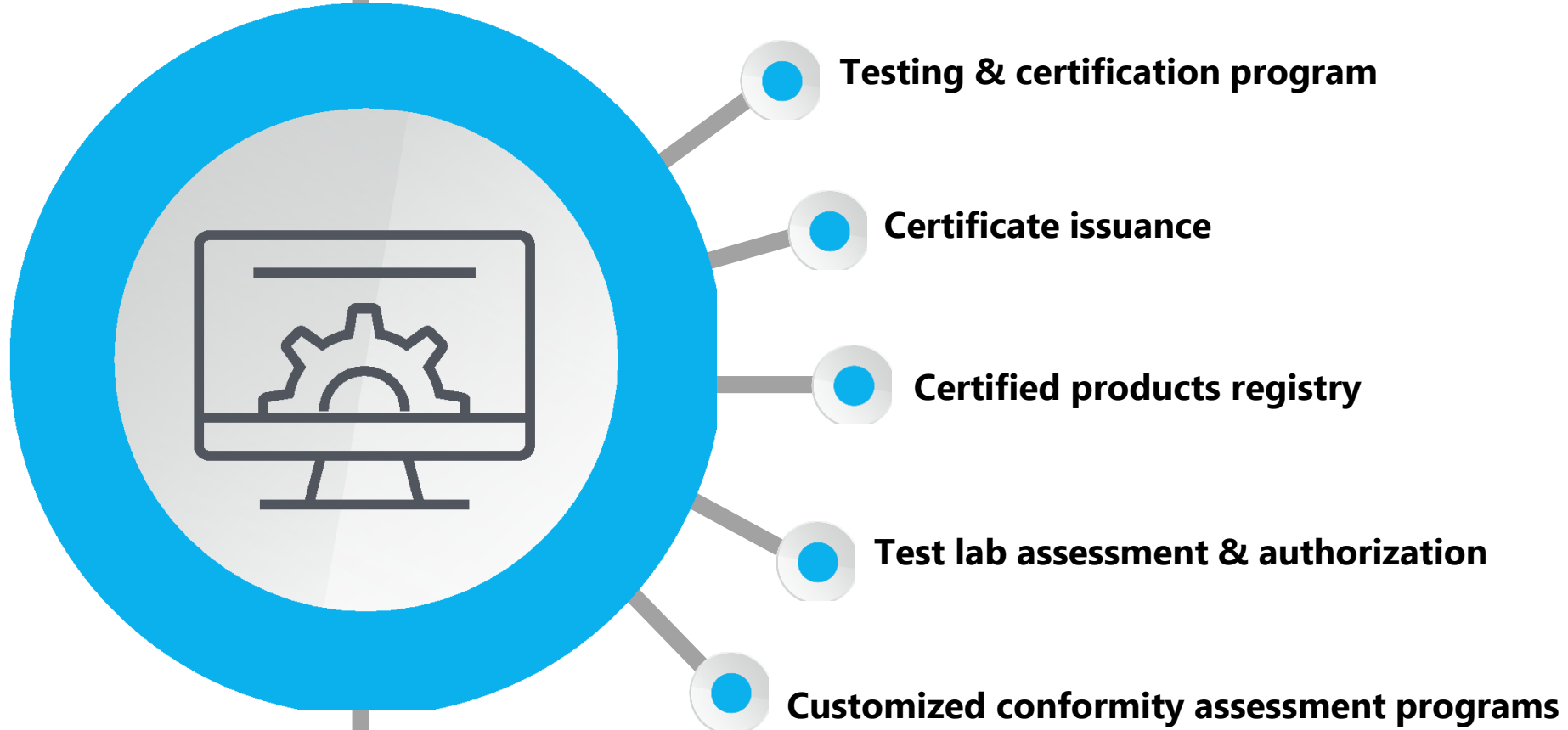
**7500+ individual members**

**Global network of technology innovators & leaders**

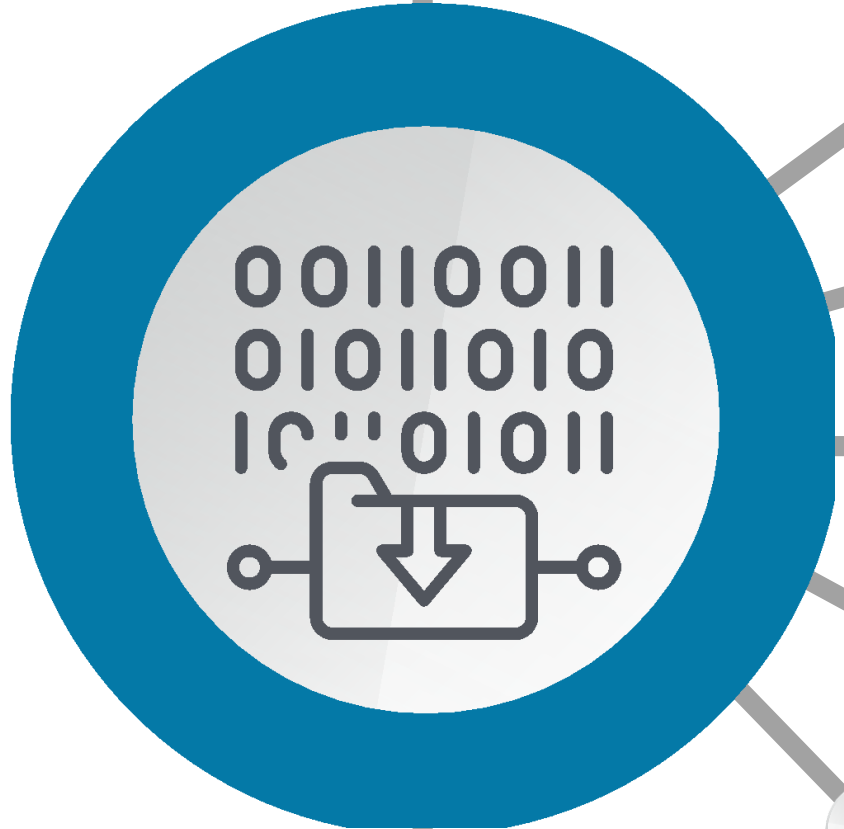
**Creating new market spaces**

**Enhanced participation opportunities**

# CONFORMITY ASSESSMENT



# REGISTRIES



**13 registries**

**Authorized registration authority**

**Identifiers used in the computer & electronics industries**

**Maintains lists of unique identifiers under standards**

**Issues unique identifiers to those wishing to register them**

# ALLIANCE MANAGEMENT



**Partnering with the Industry Standards & Technology Organization**

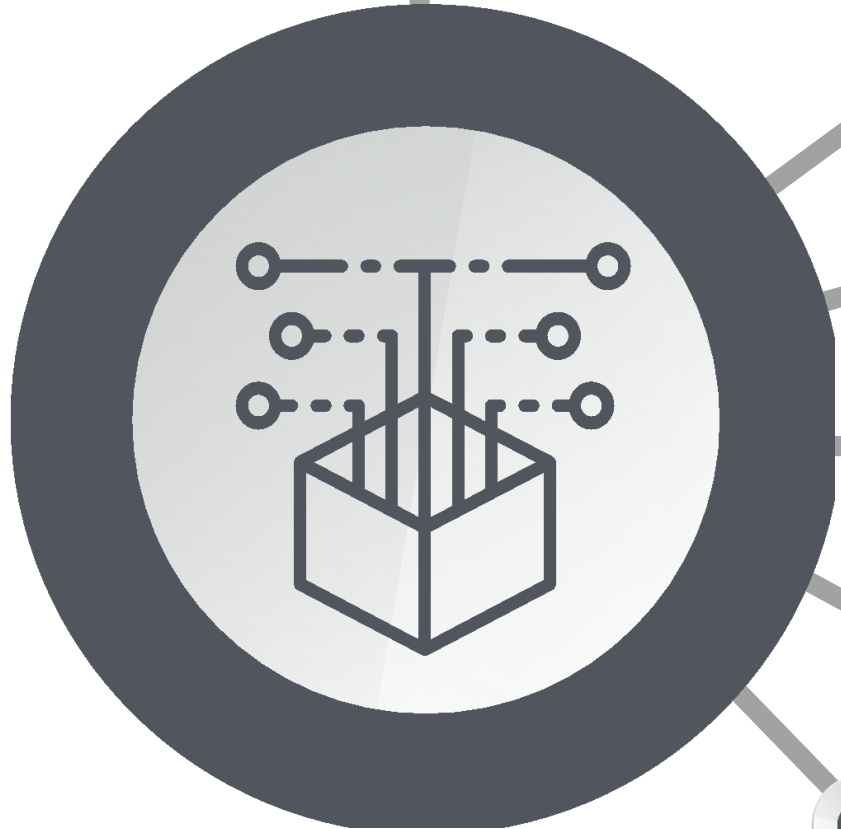
**World-class support framework & resources**

**Turnkey legal & operational support**

**Quickly establish industry alliances, consortia & tech associations**



# OPEN SOURCE



**Community-powered platform**

**Develop & advance technologies**

**Flexible, cost-effective**

**Open to anyone developing open source projects**

**Build ecosystems around major open source projects**

# IEEE SA OPEN

A comprehensive open source development platform that harnesses the power of familiar open source development tools with IEEE's unparalleled member network, technical expertise & resources to accelerate innovation & enable technological advancements that positively impact the way people live, work, & communicate.

A home to enable independent software developers, startups, projects, academia, foundations & industry organizations around the world to create, test, manage & deploy innovative projects in a collaborative, safe & responsible environment. IEEE SA Open bridges global standards development & open-source developer communities, accelerating the development & adoption of technical solutions aimed at benefiting society.

# THE PROGRAM: OPEN TO ALL

- Multiple models available based on user, community, project needs
- Use cases for standards and non-standards projects
- Get guidance and support, if you need it, from IEEE SA Open: Open Source Community Managers, helpdesk, and community members
- Connect with IEEE's extensive network of Members, Societies, Standards Committees and Working Groups for collaboration
- Capable of bridging the gap between Standards development and open source communities to allow for the advancement of nimble and creative technical solutions at a faster pace
- Open and transparent governance models





# EXPANDING AREAS



**PHARMACEUTICAL  
& LIFE SCIENCES**



**MOBILITY &  
AUTOMOTIVE**



**AGRICULTURE**



**LEGAL**



**ENERGY**



**HEALTHCARE**



# SUSTAINABILITY



# STANDARDS & SOCIAL IMPACT

Our global community is developing sustainable, consensus-based technical standards and solutions for societal issues.



**Ethical AI Systems**



**Digital Intelligence**



**Data Governance**



**Dignity & Agency  
in Identity**



**Fairness in the  
Trade of Data**



**Clean & Sustainable Energy**



**Child Online Rights**



**Connectivity  
& Mobility**

# GLOBAL COLLABORATION

**Collaborating and coordinating with national, regional and international standards bodies**

**Global collaboration helps to ensure the coordination of standardization works and the harmonization of standards**

**Existing global standards jointly developed by IEEE provide solutions to industry needs, avoid unnecessary duplication and can be leveraged for technology transfer, interoperability and global marketability—supporting import/export**



# COLLABORATION VEHICLES

## National adoption of IEEE standards

- Countries can adopt current IEEE standards
- Translation of adopted standards also an option

## Memorandum of Understanding

MOUs with organizations for standards-related cooperative activities, including:

- Joint workshops and events
- Joint standards development
- Capacity-building
- Technical-level cooperation





# GLOBAL ENGAGEMENT

Meeting Local Needs on a Global Scale



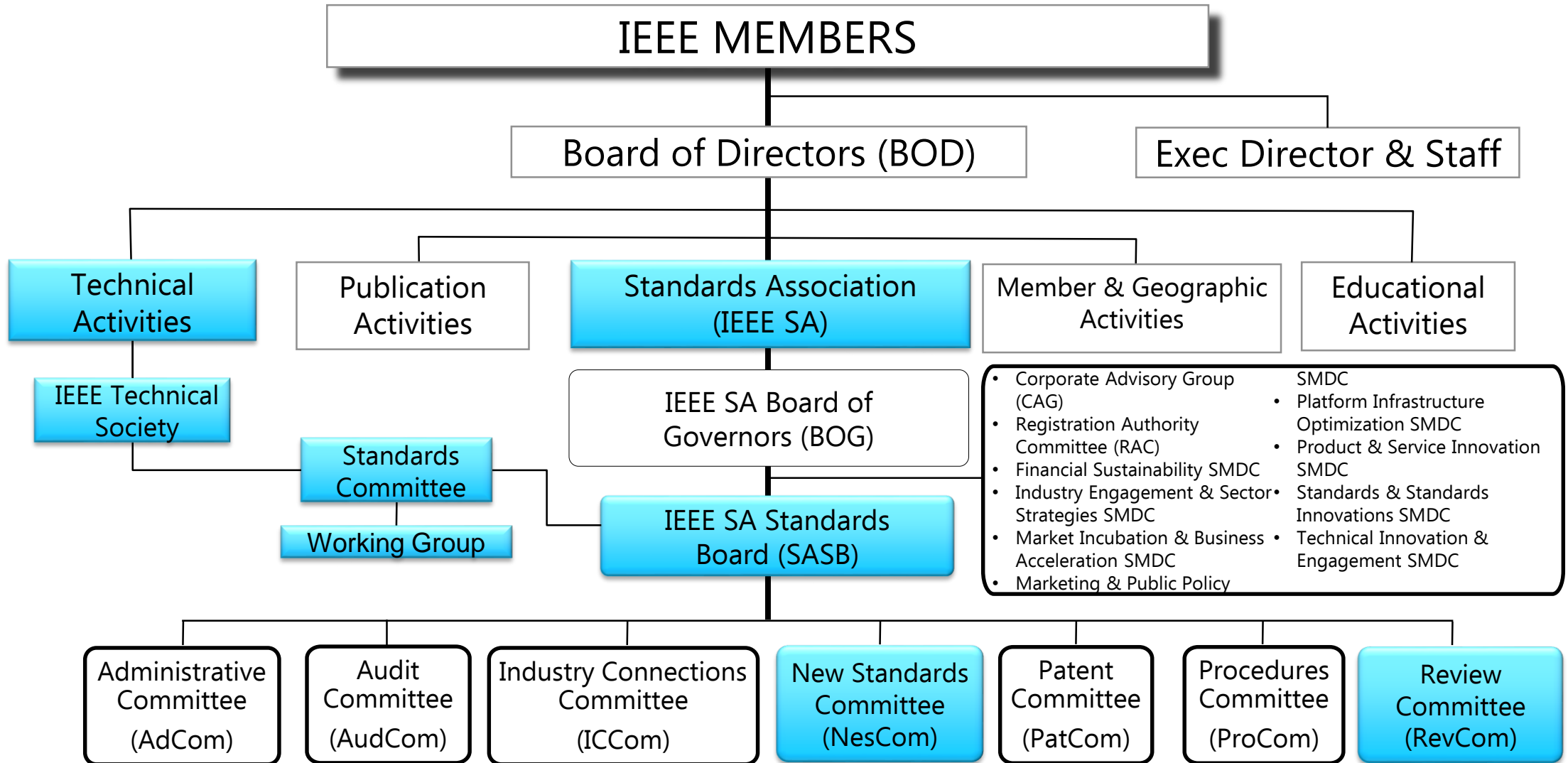
RAISING THE WORLD'S STANDARDS

# IEEE STANDARDS DEVELOPMENT PROCESS

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## OVERVIEW

# IEEE Organization



# IEEE STANDARDS BOARD

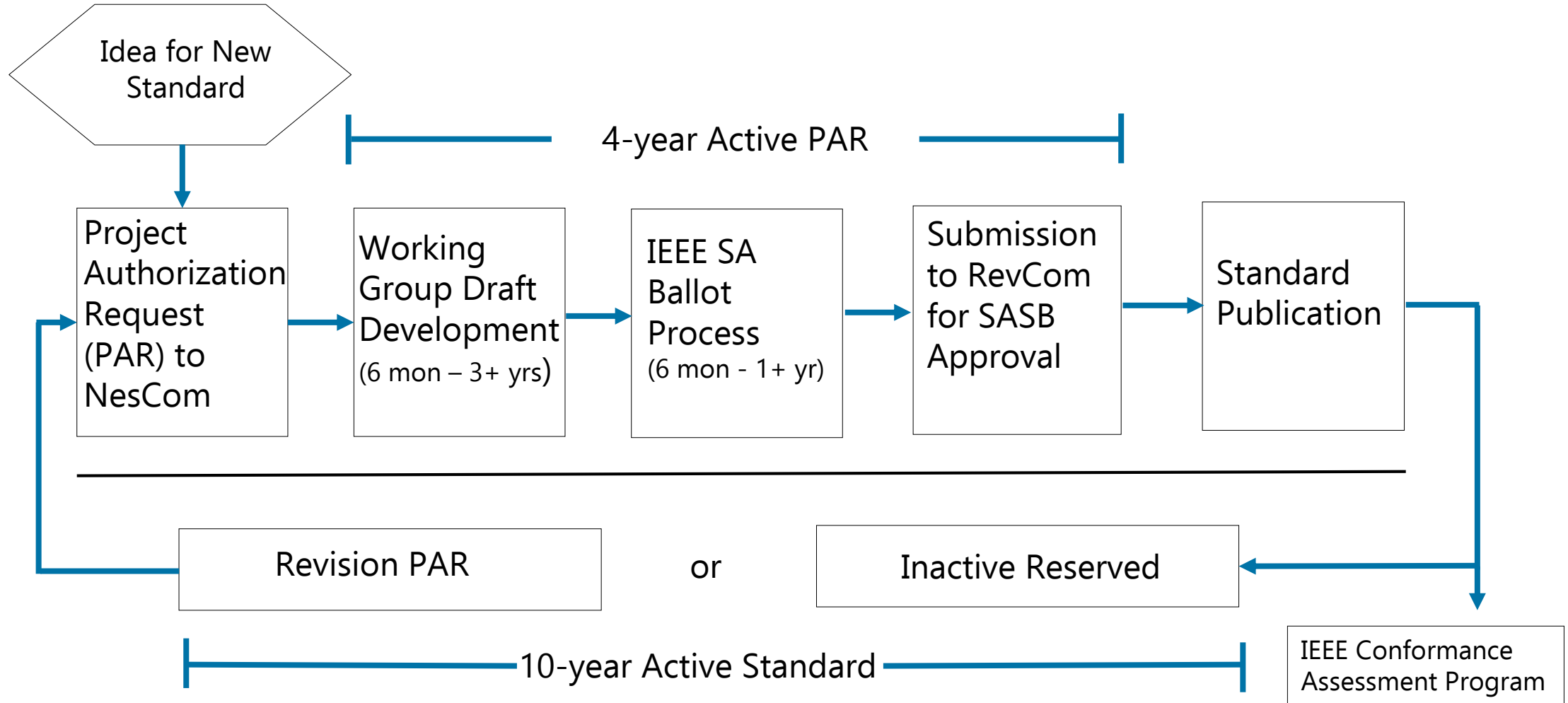
**Establishes/maintains  
a consensus standards development  
process to assure:**

- Openness
- Fairness
- Balance of interests among materially affected parties
- Right to appeal
- Timely dissemination of standards and technical information

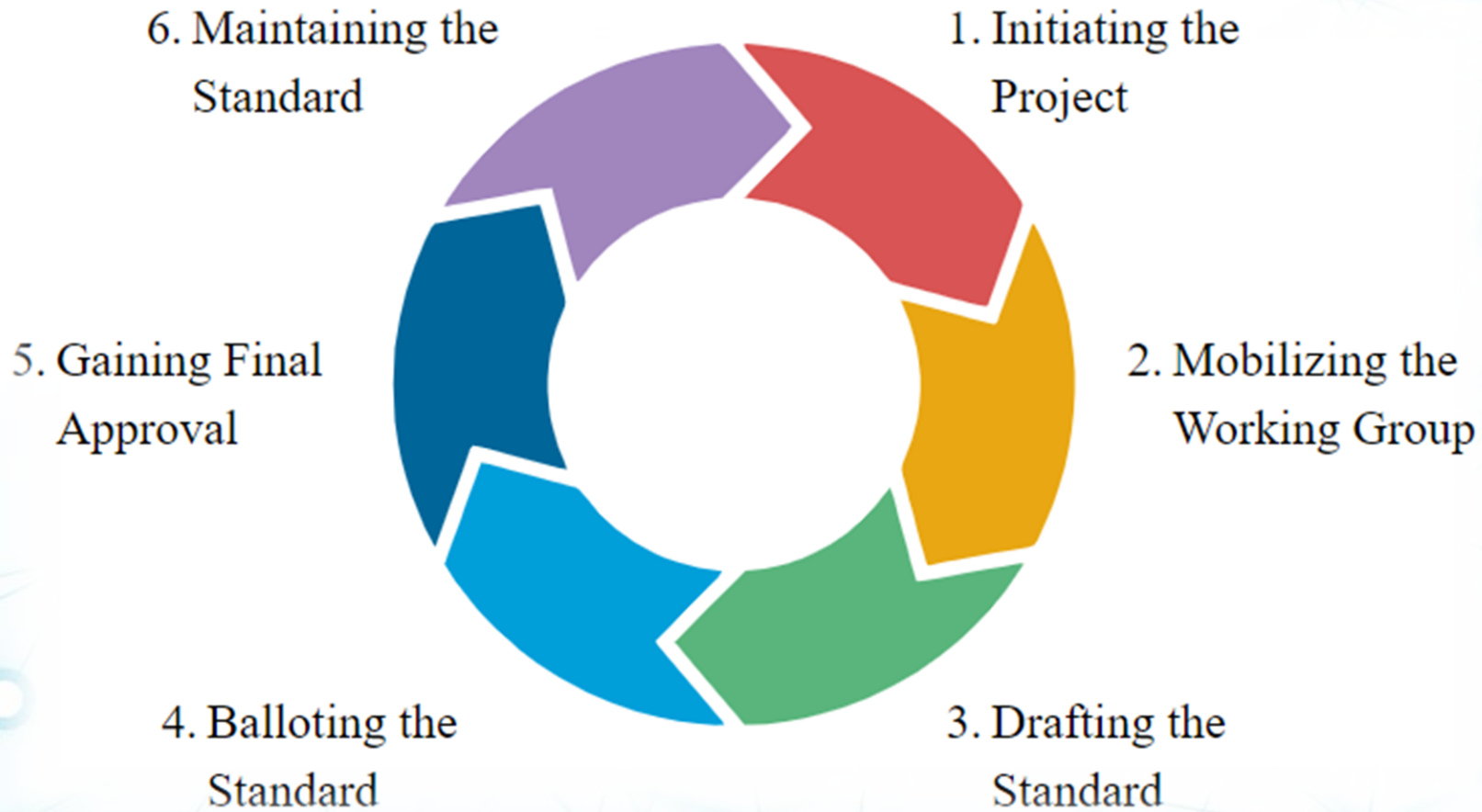




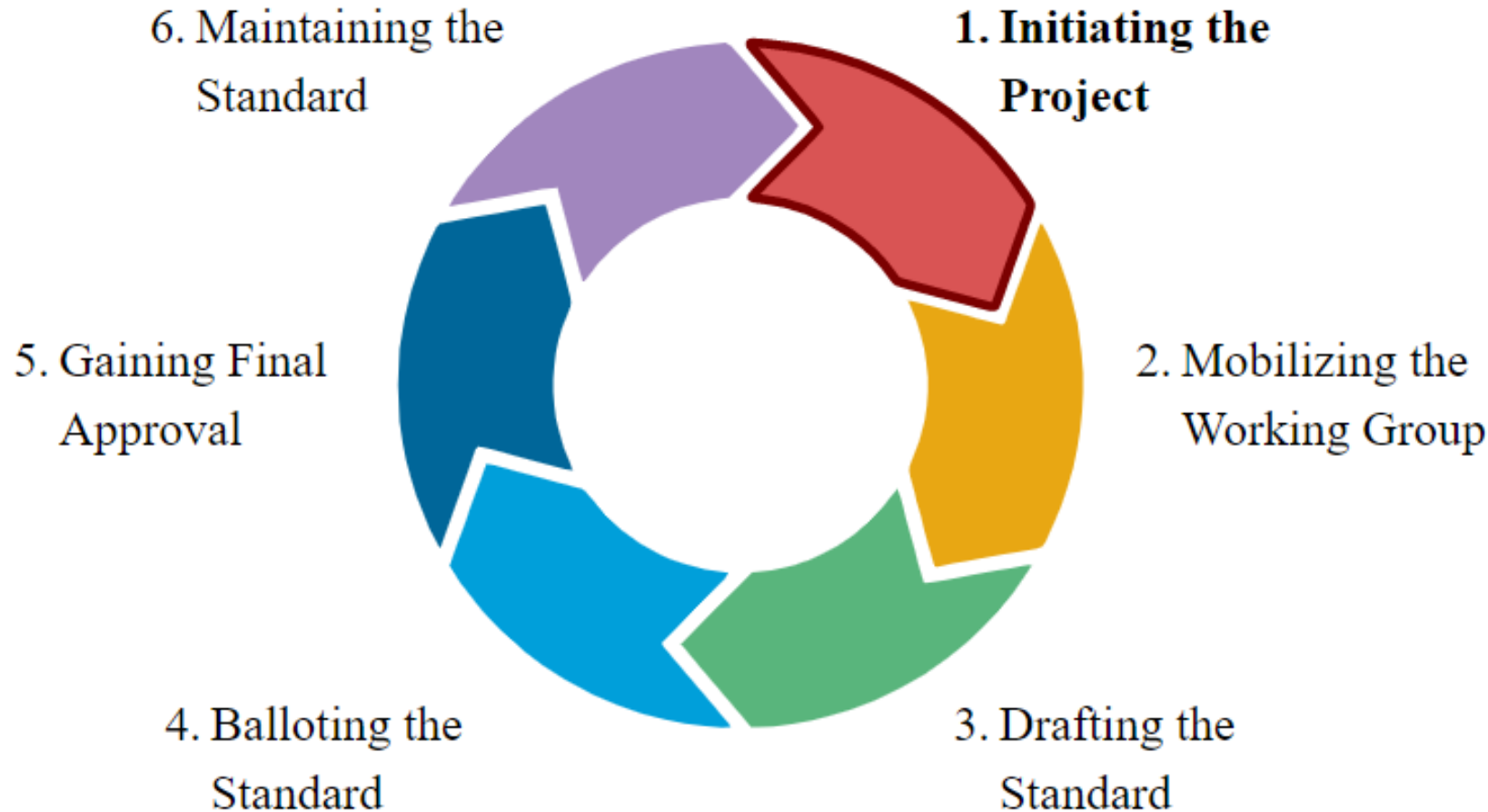
# IEEE Standards Development Process Flowchart



# IEEE Standards Development Lifecycle



# IEEE Standards Development Lifecycle

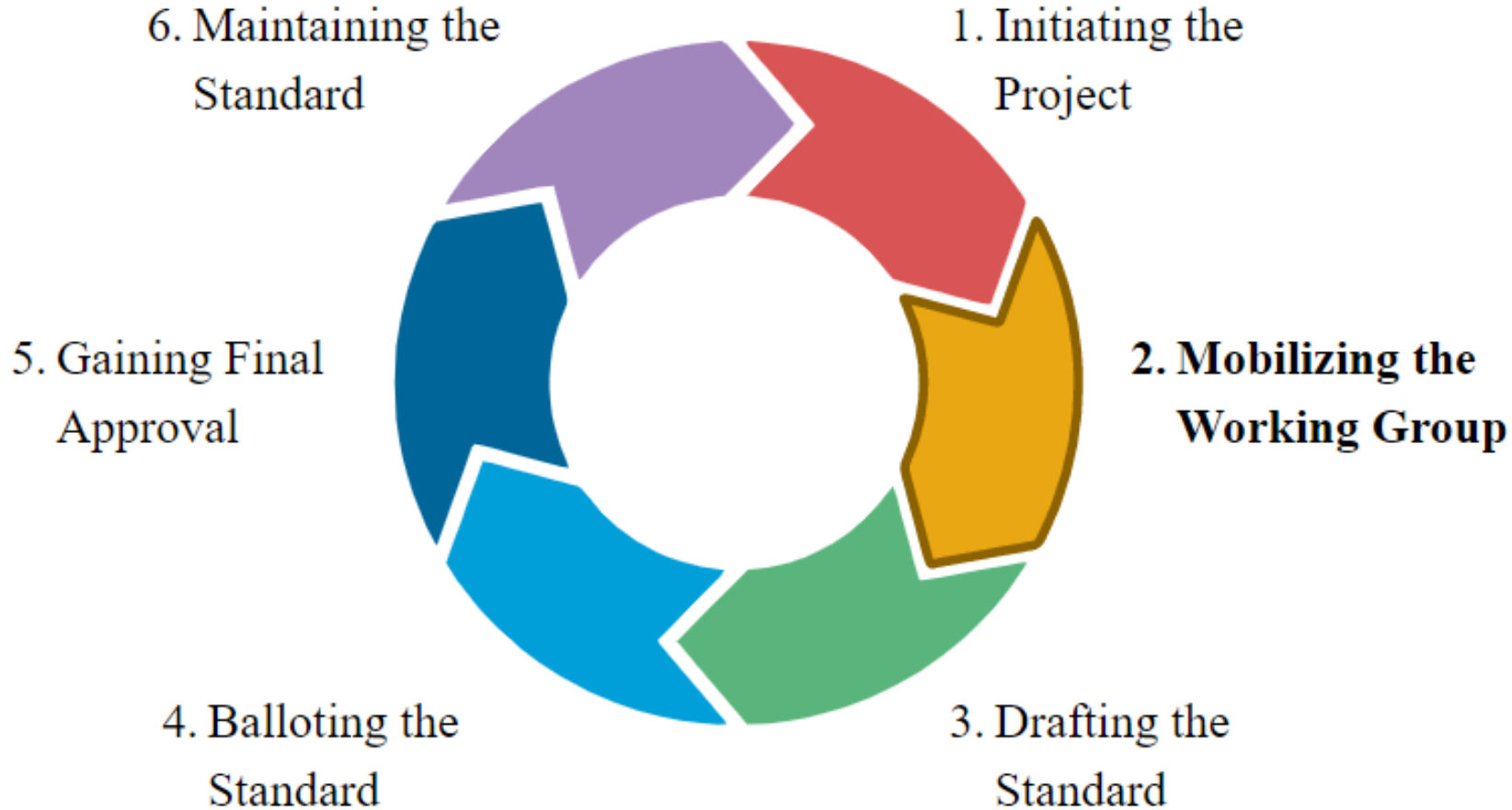


## STAGE 1

### Initiating the Project

- [How Projects Are Started](#)
- [Types & Nature of Projects](#)
- [How to Find a Standards Committee](#)
- [Submitting A Project Request](#)
- [Working Group Toolkit](#)

# IEEE Standards Development Lifecycle

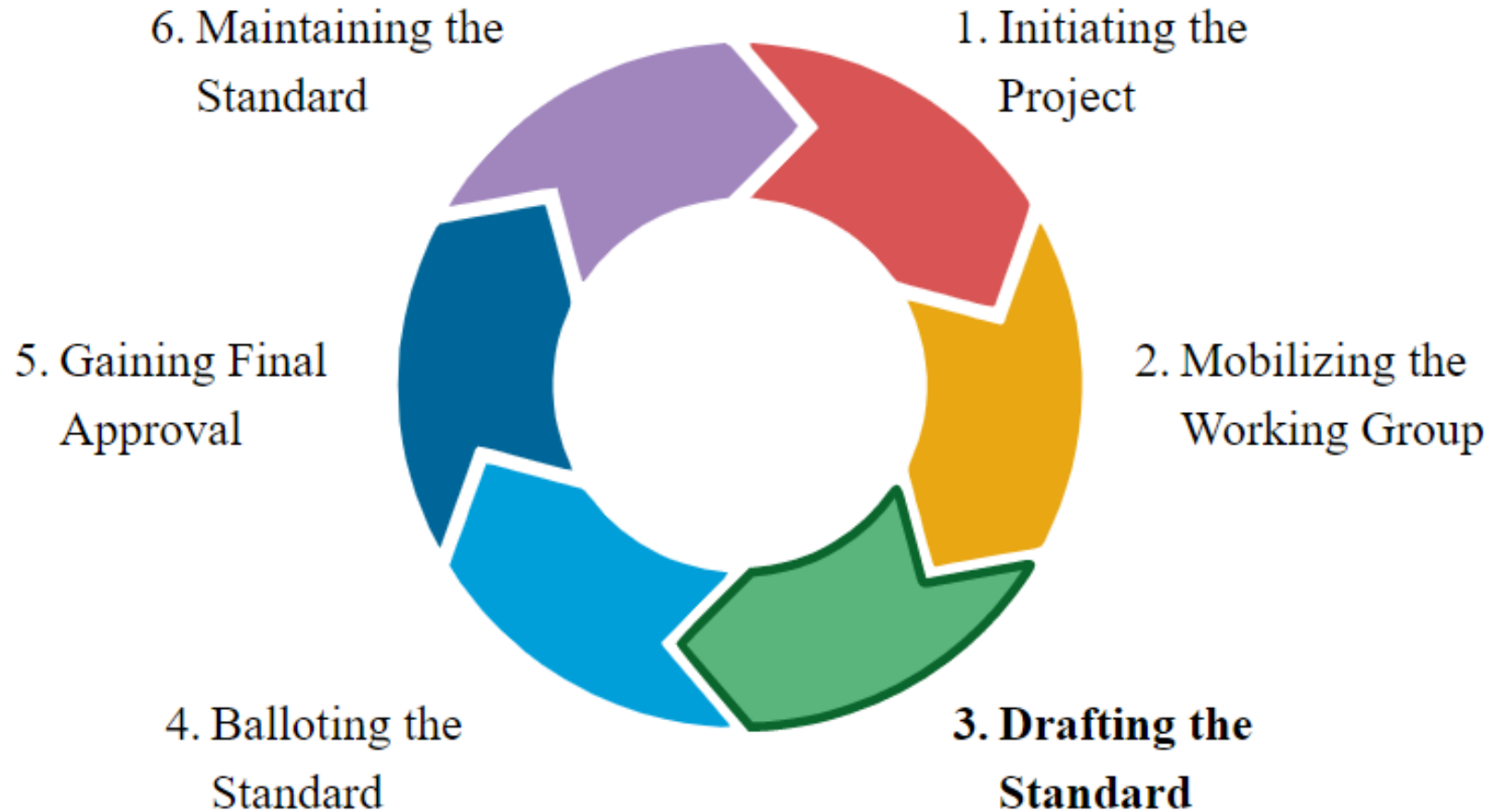


## STAGE 2

Mobilizing the Working Group

- [What is a Working Group?](#)
- [Who Can Participate?](#)
- [How to Form a Team](#)
- [How are Working Groups Governed?](#)
- [Managing the Working Group](#)
- [IEEE SA Patent Policy Information](#)
- [IEEE SA Copyright Policy](#)
- [IEEE SA Entity Participant Behavior Slides](#)

# IEEE Standards Development Lifecycle



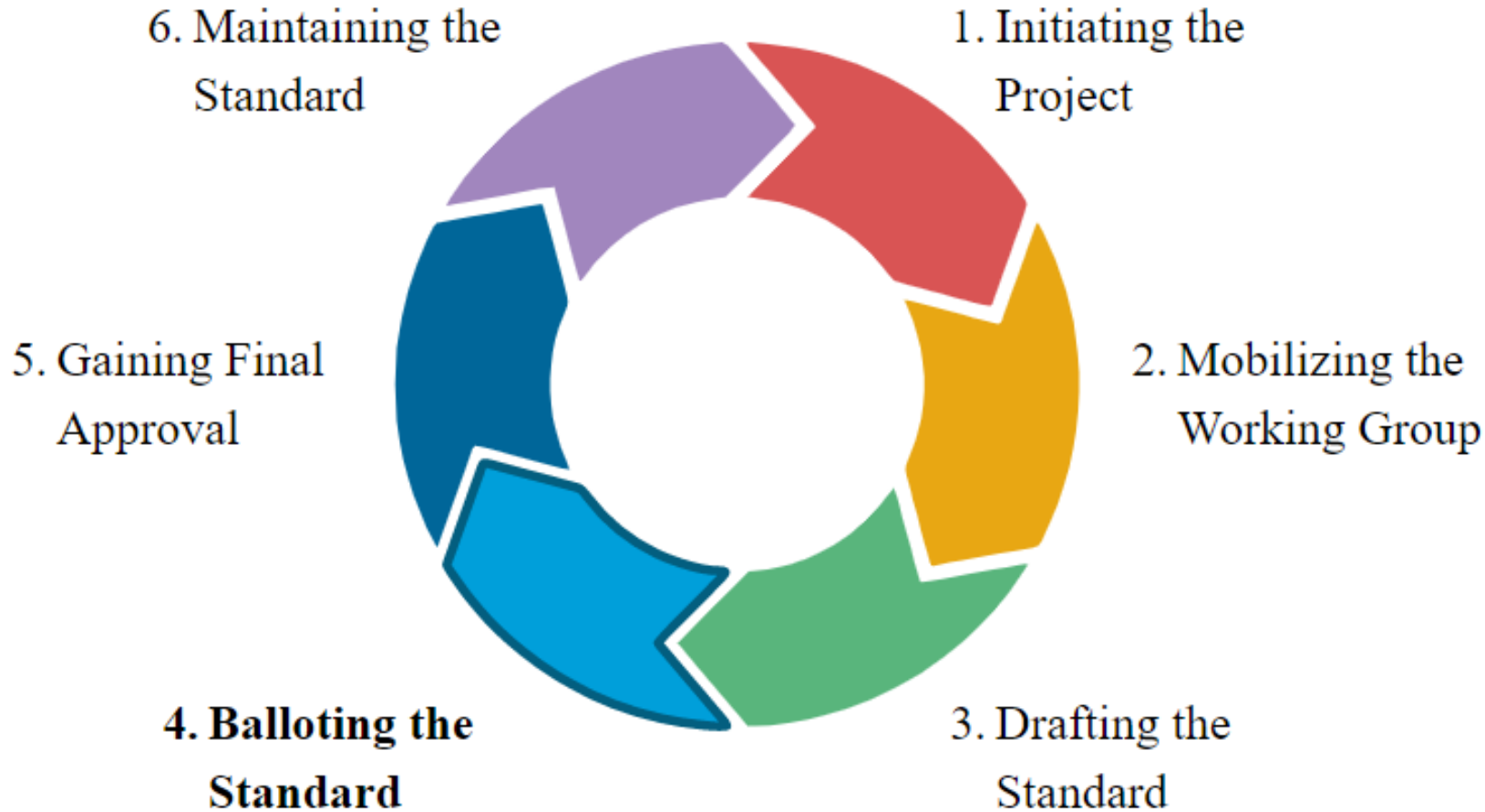
## STAGE 3

### Drafting the Standard

- [How are Standards Written?](#)
- [The Standards Preparation & Editing Process](#)
- [Getting Help: How your program manager and staff editor can help you](#)
- [SCC14 Conventions](#)
- [IEEE Standards Dictionary Online](#)
- [Writing the Standard](#)



# IEEE Standards Development Lifecycle

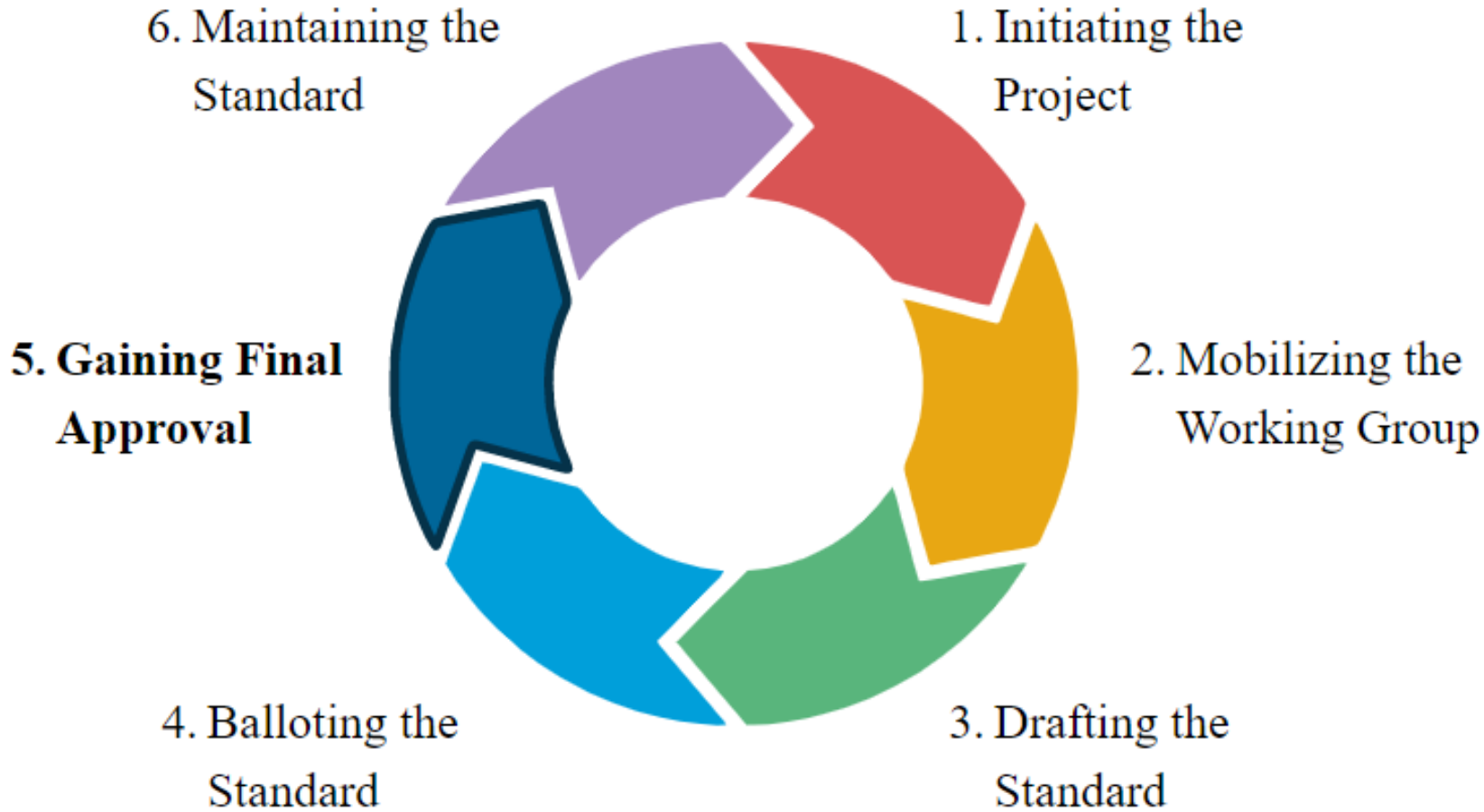


## STAGE 4

Balloting the Standard

- [The Balloting Process](#)
- [Casting Your Ballot](#)
- [The IEEE SA Public Review Process](#)

# IEEE Standards Development Lifecycle

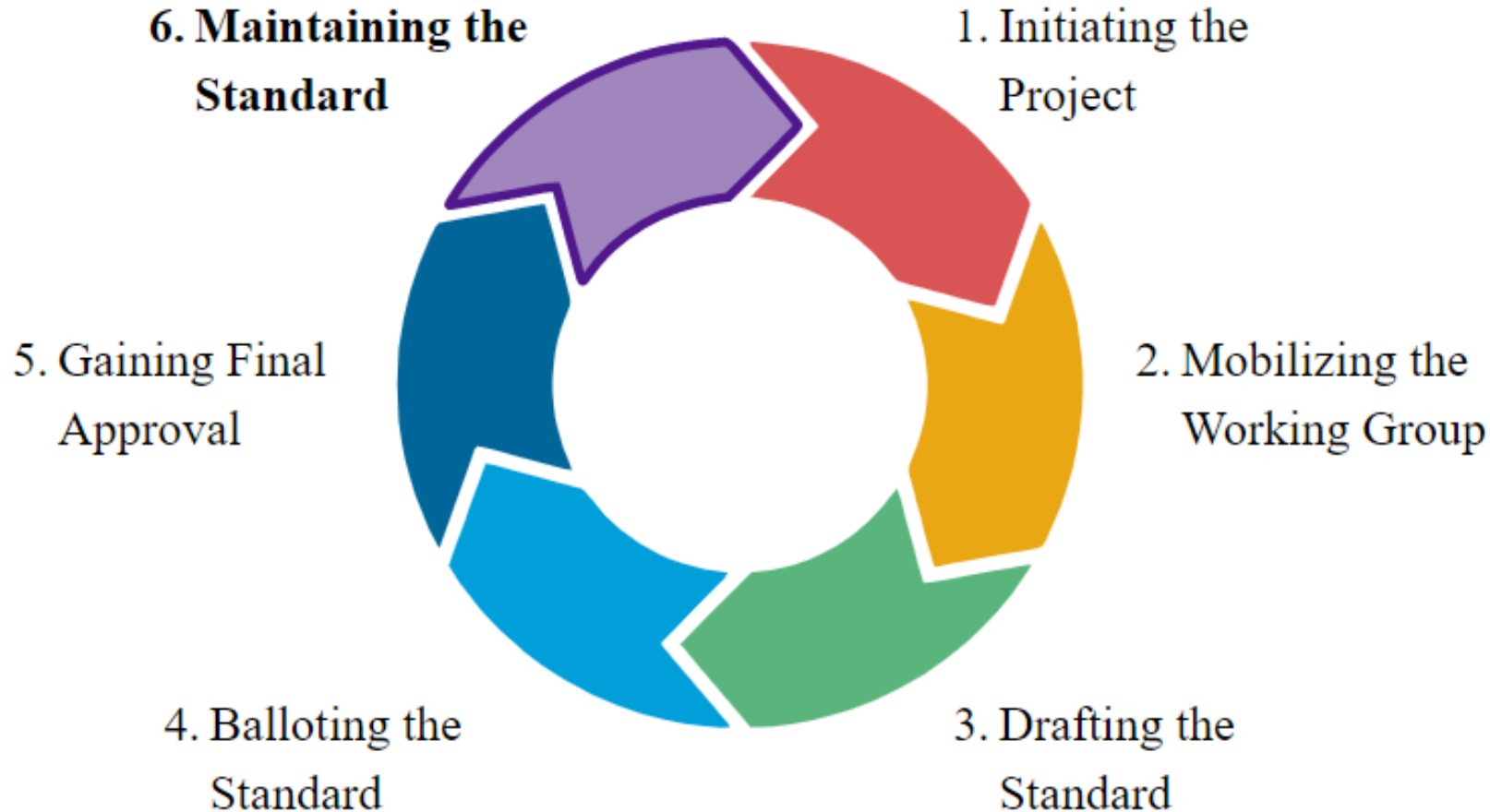


## STAGE 5

Gaining Final Approval

- [How is Final Approval Obtained?](#)
- [What Happens to a Standard After Approval?](#)
- [How are Standards Distributed?](#)

# IEEE Standards Development Lifecycle



## STAGE 6

Maintaining the Standard

- [What Happens When Standards Have Errors?](#)
- [Revising Standards](#)

# IEEE Standards Development Entity Working Group membership

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## Individual Method

- Participants are individual technical experts
- Individuals represent themselves
- Each individual participant has 1 vote
- SA Ballot groups are made up of a minimum of 10 individuals
- SA Ballot group participants must be IEEE SA individual members or pay a per-ballot fee

## Entity Method

- Participants are "entities," i.e., companies, universities, government bodies, etc.
- One (1) Designated Representative (DR) and one or more Designated Representative Alternates (DRAs) represent the entity in the working group
- Each entity has 1 vote
- Minimum membership is 3 entities per working group
- Entity Member Representative is the entity contact for IEEE SA corporate membership



# IEEE SA Entity Working Group Membership

## Observers

- Basic IEEE SA Corporate Members are permitted to attend an unlimited number of corporate standards working groups as an Observer only.
- Advanced IEEE SA Corporate Members are also permitted to attend as an Observer (e.g., have not paid working group fees).
- Non-Corporate entities may attend one (1) working group meeting to help them determine their interest in becoming an IEEE SA Corporate Member.

# IEEE SA Entity Working Group Membership

## Members

- An entity shall be an IEEE SA Advanced Corporate Member to attain membership and voting rights in an entity-based working group and shall pay working group services fee, if established
- Voting Member
  - Advanced IEEE SA Corporate Membership, has paid Working Group fees, and has met the attendance requirements as described in the working group policies and procedures
- Attaining or Non-Voting Member
  - Advanced IEEE SA Corporate Membership, has paid Working Group fees, but has not met the attendance requirements

# IEEE SA Entity Working Group Membership

## Individual Experts

- An individual technical expert can be invited to attend up to three (3) working group meetings
- Individual's attendance should be defined around a specific technical topic and scope
- Working group vote to approve individual technical expert attendance and their scope must be captured in the meeting minutes

See [IEEE SA Bylaws 5.2.1.2](#)

# IEEE SA Corporate Membership Information

- To verify membership status, see the [IEEE SA Corporate Membership List](#)
- To sign up for corporate membership, see [IEEE SA Membership website](#) or contact:

Christopher Krysa  
IEEE SA Membership Administrator  
[c.krysa@ieee.org](mailto:c.krysa@ieee.org)  
+1 732 562-2681



# IEEE Standards Development eTools

## **Word Press**

- Provides dedicated, IEEE-hosted, public accessible website with access to publicly-available information such as the current working group member list, meeting information and policies and procedures

## **Webex**

- No cost, dedicated teleconferencing software for the working group

## **iMeet Central Online**

- Web-based, members-only collaboration workspace to upload and share files, continue technical discussions via forum, manage timeline and milestones via calendar

## **ListServ**

- Public e-mail reflector available for all interested parties
- Working group members-only e-mail reflector

# IEEE SA Program Manager Role

**Serves as the primary point of contact for a standards committee and working group**

- Coordinates the work of IEEE SA staff team including editorial, governance and others

**Is a trusted partner and advisor in supporting the project outcome**

- Provides a basic level of project management

**May provide additional support, such as optional secretarial services**

- IEEE SA offers fee-based support services contracts available upon request

**Provides support on process related matters such as**

- Establishing working group policies and procedures
- etools establishment such as teleconferencing software, website and e-mail distribution lists

# IEEE SA Program Manager

## **Jonathan Goldberg**

IEEE SA Manager, Operational Program Management

IEEE Computer Society SA Program Manager

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# THANK YOU

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Manager, Operational Program Management  
IEEE Standards Association



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