Executive Director Report

Stephen Welby, IEEE Executive Director

Region 10 Virtual Meeting

7 March 2020

SOCIAL IMPACT

GLOBAL
PUBLIC POLICY

GLOBAL
HUMANITARIAN EFFORTS

CONTINUING
EDUCATION & CERTIFICATION

ETHICS
IN TECHNOLOGY

IEEE Strategic Plan **2020-2025**

IEEE Strategic Plan

2020-2025

OUR MISSION

We foster technological innovation and excellence for the benefit of humanity.

OUR VISION

We will be essential to the global technical community and to technical professionals everywhere, and be universally recognized for the contributions of technology, and of technical professionals in improving global conditions.

CORE VALUES

- Trust
- Global Community Building
- Integrity in Action
- Service to Humanity
- Partnership
- Growth & Nurturing

IEEE WILL:

- Drive global innovation through broad collaboration and the sharing of knowledge

- Enhance public understanding of engineering and technology and pursue standards for their practical application

- Be a trusted source of educational services and resources to support life-long learning

- Provide opportunities for career and professional development

- Inspire a worldwide audience by building communities that advance technical interests, inform public policy, and expand knowledge for the benefit of humanity

IEEE will foster a collaborative environment that is open, inclusive, and free of bias and will continue to sustain the strength, reach, and vitality of our organization for future generations.

www.ieee.org/strategic-plan
Approved by the IEEE Board of Directors, November 2019

IEEE
Advancing Technology for Humanity

Mission and Vision

OUR MISSION

We foster technological innovation and excellence for the benefit of humanity.

OUR VISION

We will be essential to the global technical community and to technical professionals everywhere, and be universally recognized for the contributions of technology, and of technical professionals in improving global conditions.

IEEE

Core Values

Trust:
being a trusted and unbiased source of technical information and forums
for technical dialog and collaboration

Growth & Nurturing:
encouraging education as a fundamental activity of engineers, scientists, and technologists
at all levels and at all times; ensuring a pipeline of students to preserve the profession.

Global Community Building:
cultivating active, vibrant, and honest exchange among cross-disciplinary
and interdisciplinary global communities of technical professionals.

Partnership:
promoting a culture of respect for the employee and volunteer, valuing contributions
at all levels of the organization, investing in training and development to enhance capabilities,
empowering individuals to make a positive difference, and building a membership organization
based on a strong volunteer-staff partnership to serve the profession.

Service to Humanity:
leveraging science, technology, and engineering to benefit human welfare;
promoting public awareness and understanding of the engineering profession.

Integrity in Action:
fostering a professional climate in which engineers and scientists continue
to be respected for their exemplary ethical behavior and volunteerism.

Trust

Global
Community
Building

Growth &
Nurturing

Partnership

Service to Humanity

Integrity
in Action

IEEE

Goals

IEEE WILL:

- Drive global innovation through broad collaboration and the sharing of knowledge

- Enhance public understanding of engineering and technology and pursue standards for their practical application

- Be a trusted source of educational service and resources to support life-long learning

- Provide opportunities for career and professional development

- Inspire a worldwide audience by building communities that advance technical interest, inform public policy, and expand knowledge for the benefit of humanity

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Delivering on this Plan

IEEE will foster a collaborative environment that is open, inclusive, and free of bias and will continue to sustain the strength, reach, and vitality of our organization for future generations.

IEEE Diversity Statement

Adopted by Board in November 2019

"IEEE's mission to foster technological innovation and excellence to benefit humanity requires the talents and perspectives of people with different personal, cultural, and disciplinary backgrounds. IEEE is committed to advancing diversity in the technical profession, and to promoting an inclusive and equitable culture in its activities and programs that welcomes, engages and rewards those who contribute to the field without regard to race, religion, gender, disability, age, national origin, sexual orientation, gender identity, or gender expression."

Revisions to IEEE Code of Ethics

Board to vote on resolution at June 2020 meeting

▸ 2019 Ad Hoc Committee on Diversity, Inclusion, & Professional Ethics also proposed potential revisions to the IEEE Code of Ethics

▸ At its November 2019 meeting, Board of Directors approved a resolution to circulate the revisions to obtain member and volunteer feedback via The Institute

   - Member comments are requested on these proposed revisions through 10 April 2020

Proposed revisions

Products and Services

THE IEEE APP:

Your global gateway to IEEE

Create a personalized experience

Get geo and interest-based recommendations

Schedule, manage, or join meetups

Read and download your IEEE magazines

Stay up-to-date with the latest news

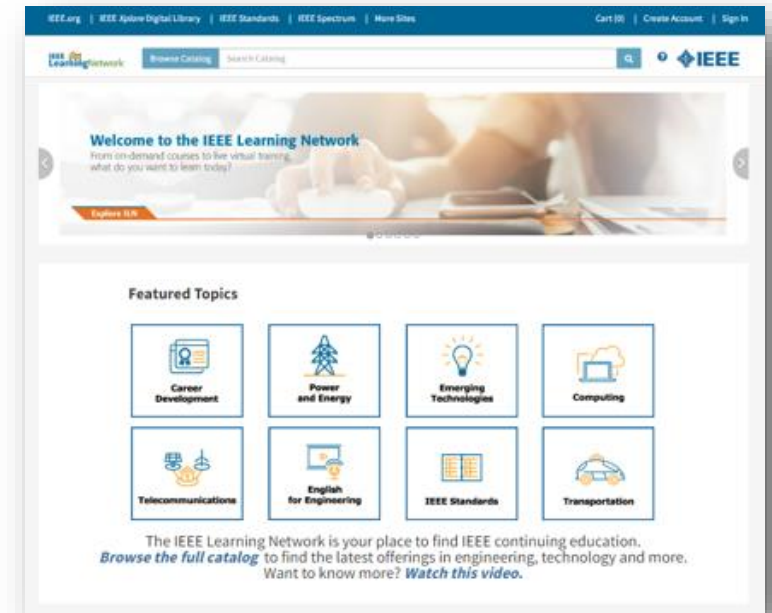**Locate IEEE members by location, interests, and affiliations**

Download Today!

Download on the **App Store**

GET IT ON **Google Play**

app.ieee.org

IEEE App is now available!

Recommended Events

MAR 12 — 2020 10th International Conference on Electronics, Computers and Artificial Intelligence (ECAI)
Iași, Romania

840+courses | **16 partners**

Content Partners

iln.ieee.org

IEEE Entrepreneurship AWS Activate: US $4M+ Credited!

▸ **Amazon Web Services (AWS) Activate Program:**

- AWS provides IEEE members with credits for access to cloud computing resources
- IEEE Entrepreneurship Community Members with an IEEE Membership eligible for:
  • $10K in AWS Promotional Credit valid for 2 years
  • 1 year of AWS Business Support (up to $5K)
  • 80 credits for Self-Paced Labs ($80 value)

What does this mean for IEEE members?
- As of 31 December 2019, 405 members have enrolled!
  • US $4M+ in AWS Promotional Credit
  • US $2M+ in AWS Business Support Credit;
  • US $32K+ in credits for Self-Paced Labs

What does this mean for your OU?
- IEEE Entrepreneurship has created marketing materials for your Society/Region/Section/etc. to enable you to:
  • promote this as a benefit to your members
  • adapt media images for social media
  • add small promos to your newsletters and sites
  • other collateral as needed
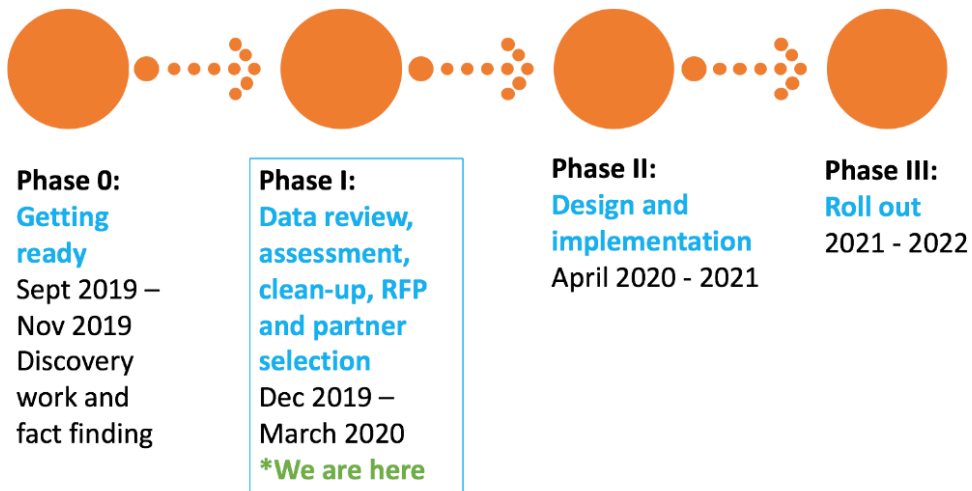
aws activate | IEEE Entrepreneurship | YOUR S/C/R/S LOGO Here!

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Next Generation Financial System

▸ Creation of a new financial process and supporting tools to improve business insights and decisions

▸ Focus on improving the volunteer experience by delivering greater financial visibility for IEEE end users, through a streamlined, simplified, efficient system

Project Timeline

Phase 0:
Getting ready
Sept 2019 – Nov 2019 Discovery work and fact finding

Phase I:
Data review, assessment, clean-up, RFP and partner selection
Dec 2019 – March 2020
*We are here

Phase II:
Design and implementation
April 2020 - 2021

Phase III:
Roll out
2021 - 2022

Desired improvements to current state

Transform **processes, roles and technology** to enhance the visibility, effectiveness, and efficiency of reporting IEEE's financial performance to management and volunteers across IEEE's portfolio of activities

Leverage **process standardization, automation of manual processes, cloud technology** for improved financial visibility

Operate through a simplified, automated, efficient and visible platform that supports users across IEEE

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Next Gen Contracts (2020 - 2021)

Selection of a contract management system that streamlines contract review process across IEEE

What will change for you?

- Simplify Contracting Process
- Create your contract and know who has it via dashboard
- Transparency in milestones and deliverables
- Electronic submission of request
- Simultaneous approval workflows
- Know who signs your contract
- Seamlessly collaborate/ eSign with third-party

Key Benefits

- Integrate with NextGen Finance
- Better templates that are easier to identify
- Stop recreating the wheel with lookback to clauses accepted in the past
- Speedy approvals
- Institutional knowledge available for future reference
- Clearer communications
- Secure/single storage repository

Contract Request

Reviewing & Redlining

Renewal / Disposition

Contract Lifecycle Management System

Approval

Audit & Reporting

Search & Retrieval

Execution

Records Mgmt.

Storage

Concentration Banking Solution for Geo Units & Conferences

Current state

▸ Platform/Technology

- Dated applications, dated technology components
- Custom built integrations need constant updates
- Not highly available

▸ Strategic

- Not compliant with IEEE cloud first strategy
- Not compliant with mobile strategy
- Missing critical fraud protection safeguards, such as Positive Pay
- Treasury module no longer supported by Oracle
- Not part of any potential future solution for Oracle EBS

Future state

A modern banking solution that enables:

▸ Local account level activity and tracking
- Deposits and disbursements
- Earned interest on unit's daily ending balance
- View statements online
- Coordinate payments to vendors
- Configure registration system to deposit funds directly

▸ Parent and sub-account structure posting
- Tracking and reporting sub-account transitions
- Interest calculation and posting for sub a/c
- Posting transactions to general ledger

BENEFITS MAINTAINED WITH ADDED FEATURES: Self-service options for writing checks, ACH, or wire transfers, Mobile application, Instantaneous transactions (real time), Streamlined processes/applications – one stop shopping, Other currencies besides USD and CAD in the future

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Cybersecurity

Increase in scams targeting IEEE volunteers and attacks on our systems

▸ Aggressive campaign of phishing targeting IEEE volunteers and members using fraudulent emails to request payments or money transfers

- Using readily available information on the web
- No IEEE data was compromised

▸ Awareness messages were sent to IEEE members and staff

▸ IT security is monitoring and investigating all fraudulent events and cyber attacks

- On average per month, IEEE firewalls block 2B attempts coming from 3M IP addresses
- On average per month, IEEE processes 28M emails of which 40% are spam and 1% contained malware
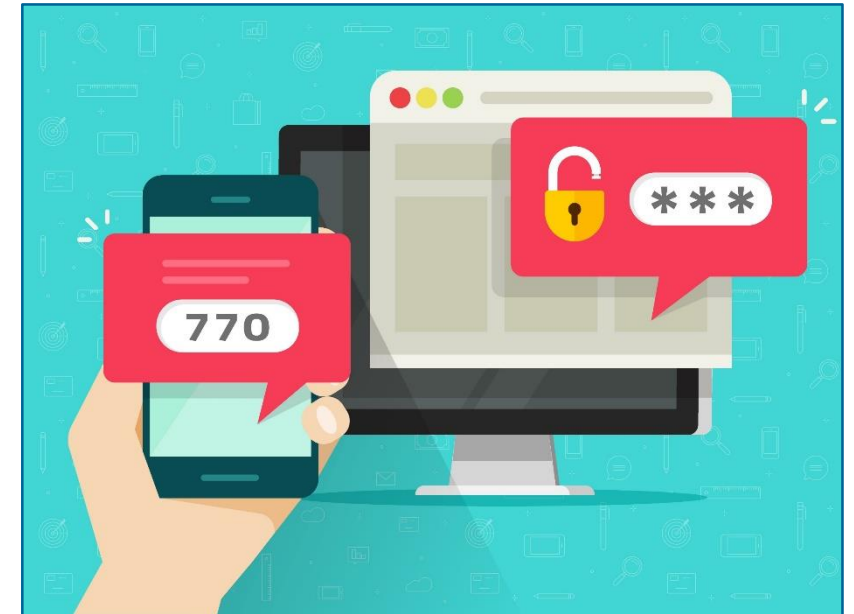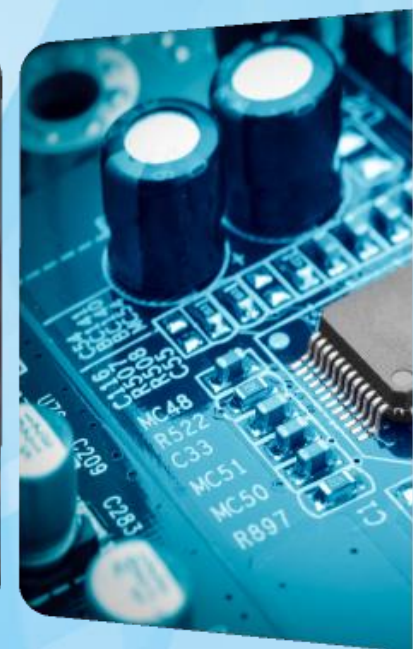
Enhancing the Security of IEEE Email Accounts

IEEE G-Suite & 2-Step verification for members

▸ Opt-in multi-factor authentication (MFA) now available for members using IEEE G-suite including email, Google docs, and Google drive

▸ Communication will be issued to all IEEE email account holders giving them the option to enable the capability with instructions

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IEEE Member Dues

IEEE Membership Dues

What are the objectives of this presentation?

▶ Help you understand what dues are and how they are calculated for higher grade and student members

▶ Give you an overview of our current dues structure, and how the current revenue is allocated

▶ Discuss how dues are used to support IEEE programs and services

▶ Identify long term membership trends

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IEEE Membership By Region

31 December, 2019

R8 – 75,814

R7 – 16,866

R10 – 135,172

R1 to 6 – 172,183

R9 – 18,972

TOTAL MEMBERSHIP – 419,007
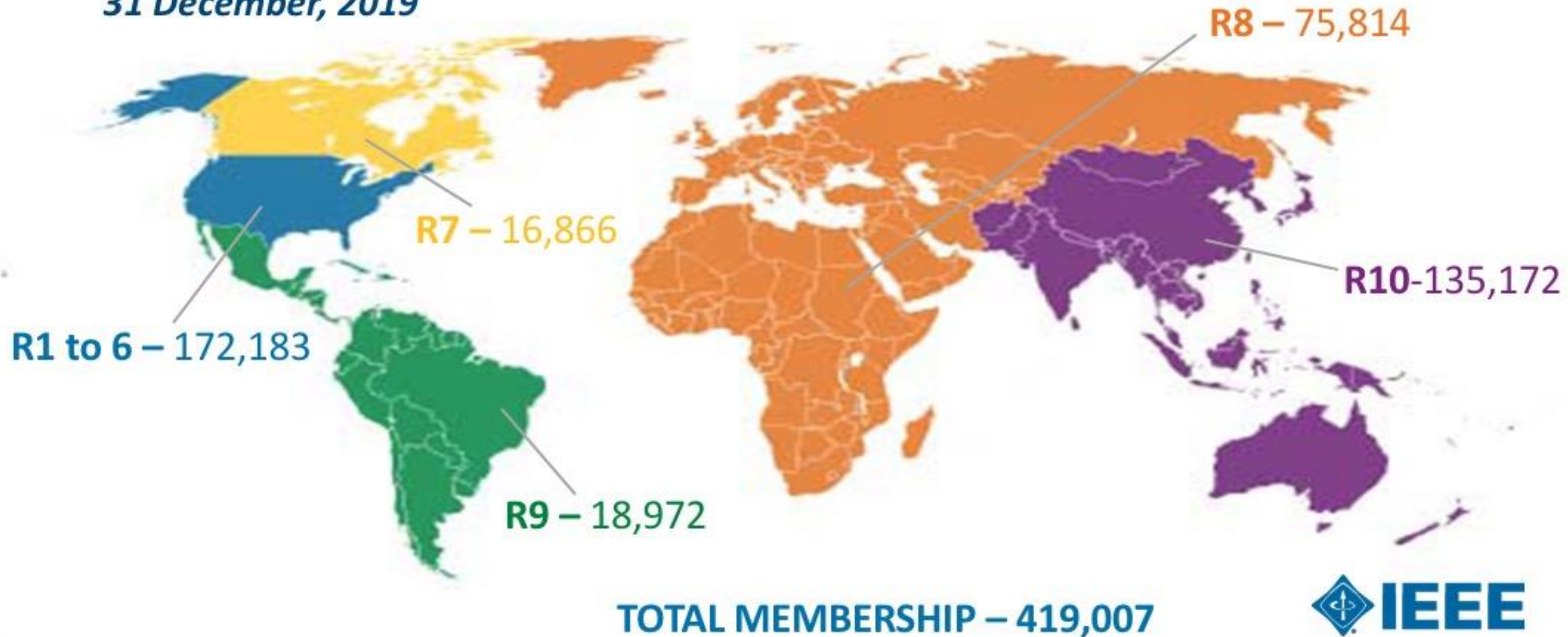
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Your IEEE Membership Dues & Assessments – 2019

Base Member Dues

Higher Grade
Full = $151

E-membership (regular) = $79

E-membership (low income) = $29

Special Circumstances = $75.50

Students (No Assessments)
Regions 1-7 = $32

Regions 8-10 = $27

Region Assessments (One of the following)

Region 1: $ 5
Region 2: $ 2
Region 3: $ 2
Region 4: $ 3
Region 5: $ 5
Region 6: $ 3
Region 7: $19
Region 8: $13
Region 9: $ 4
Region 10: $ 5

Japan: R10 + $25

Other Assessments (as applicable)

$46   IEEE-USA Assessment (Regions 1-6, exc Jamaica) only

$3   ABET university accreditation activities (Regions 1-6, exc Jamaica) only

$5 European Public Policy (EU/EFTA countries only)

Your higher grade dues payment is the sum of 3 components: Base dues, local activities in your Region/Section and local professional programs

Note: Dues are waived for IEEE Life Members

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Total IEEE Membership Dues & Assessments Revenue–2019

Total Membership Base Dues: $32.5M

Revenue from Higher Grade Members: $29.7M

Revenue from Student Members: $2.8M

Region Assessments: $1.5M

Region 1:	$ 78.8K
Region 2:	$ 28.9K
Region 3:	$ 28.9K
Region 4:	$ 32.5K
Region 5:	$ 69.9K
Region 6:	$ 85.5K
Region 7:	$150.7K
Region 8:	$496.1K
Region 9:	$ 24.7K
Region 10:	$255.2K
Japan:	$240.1K

Other Assessments: $5.2M

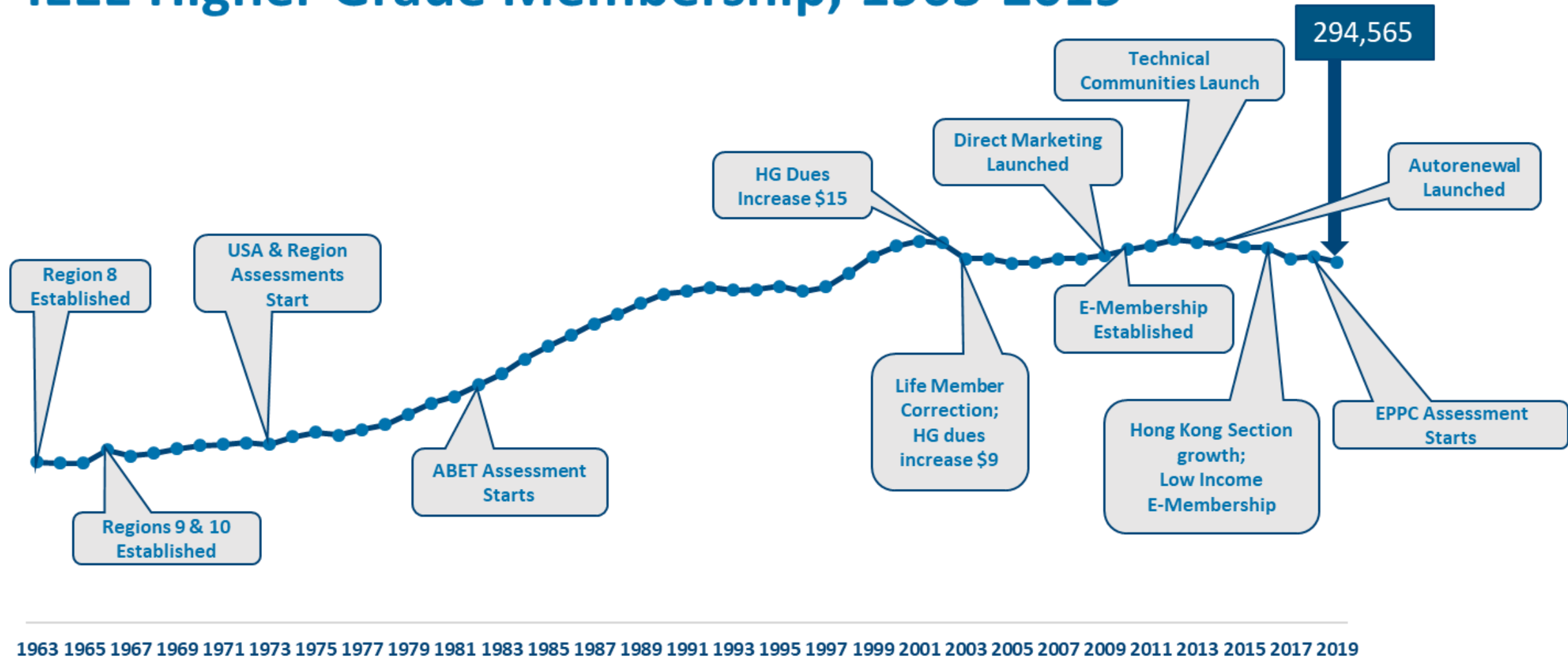$4.7M   IEEE-USA

$0.3M   ABET

$0.2M   European Public Policy

Dues support IEEE member programs & services

IEEE

Note: Revenue from Society Memberships ($7M) and Affiliate fees ($0.6M) not included in analysis

Total IEEE Membership, 1963-2019

Data as of 31 December 2019

IEEE PROPRIETARY
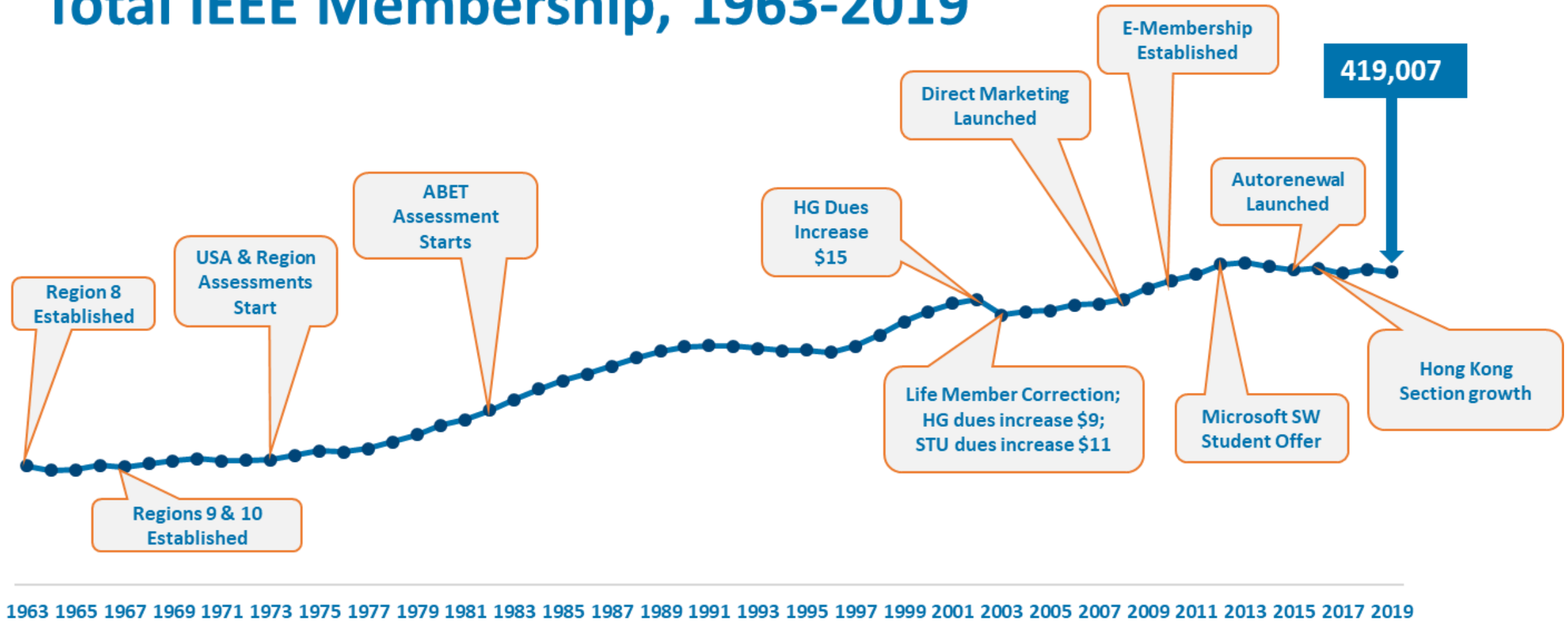
IEEE Higher Grade Membership, 1963-2019

294,565

Technical Communities Launch

Direct Marketing Launched

HG Dues Increase $15

Autorenewal Launched

Region 8 Established

USA & Region Assessments Start

E-Membership Established

Life Member Correction; HG dues increase $9

Regions 9 & 10 Established

ABET Assessment Starts

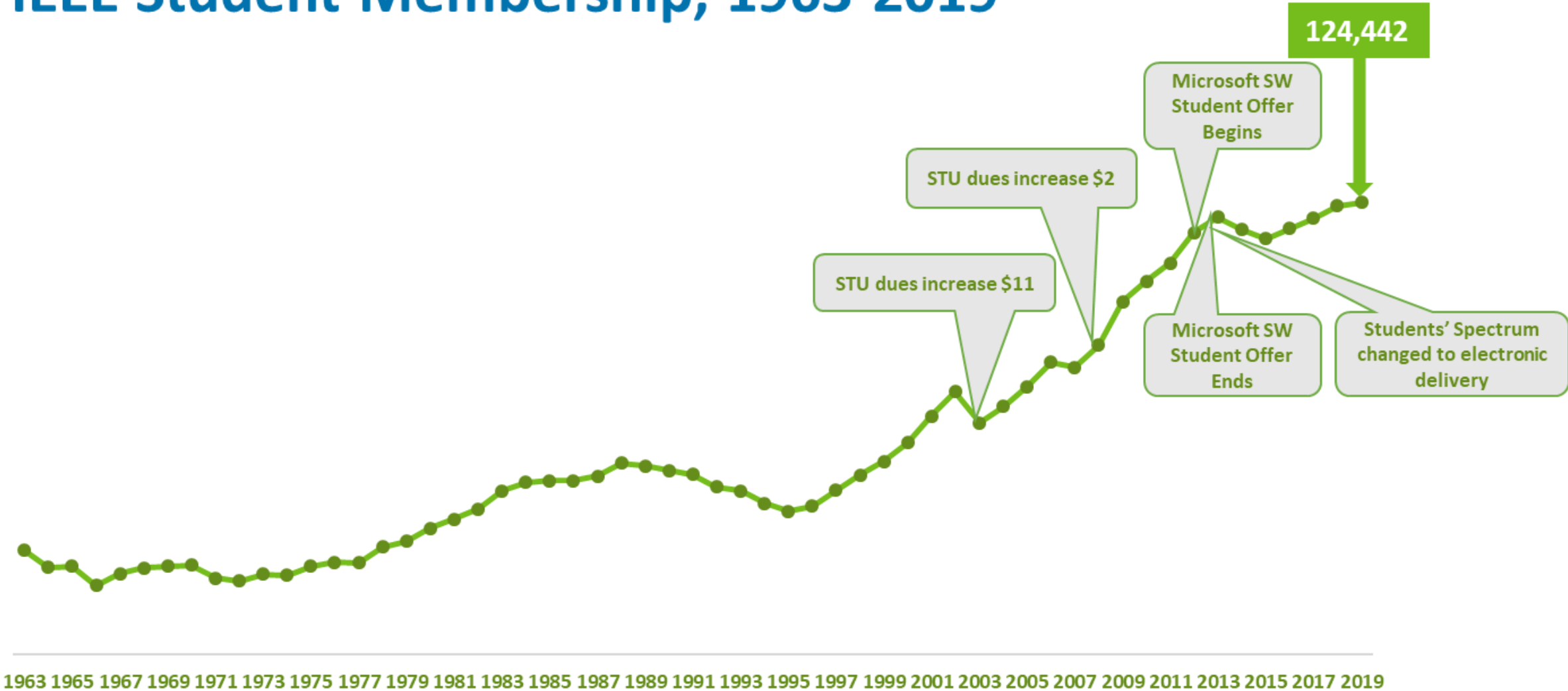Hong Kong Section growth; Low Income E-Membership

EPPC Assessment Starts

1963 1965 1967 1969 1971 1973 1975 1977 1979 1981 1983 1985 1987 1989 1991 1993 1995 1997 1999 2001 2003 2005 2007 2009 2011 2013 2015 2017 2019
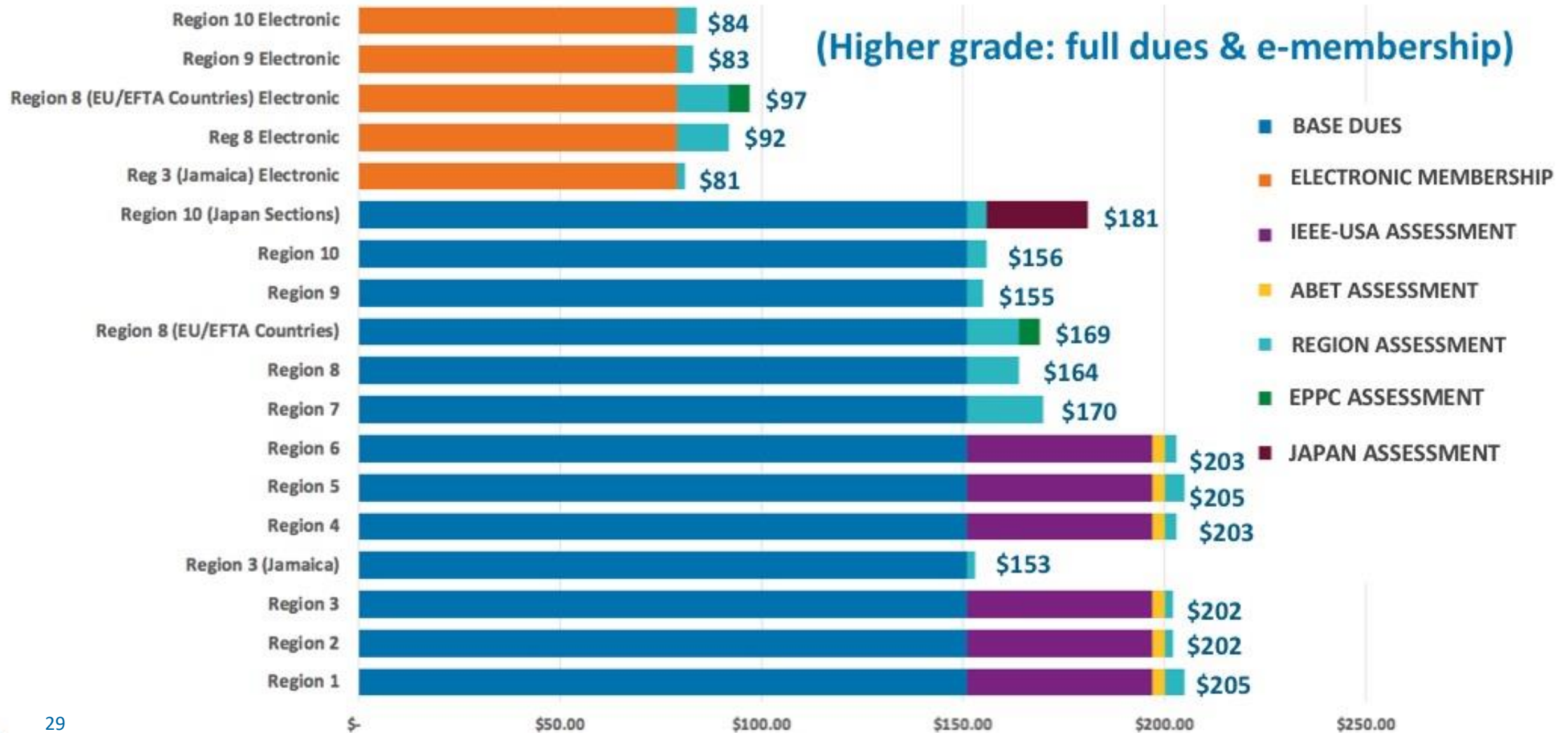
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Layers of IEEE Membership Dues 2019

Base Member Dues and Reductions

Higher Grade
Full = $151
E-member (regular) = $79
E-member (Low income) = $29
Special Circumstances (1/2) = $75.50

Students (No Assessments)
Regions 1-7 = $32
Regions 8-10 = $27

Region and Other Assessments*
(as applicable)

Regions 1: $5
Region 2: $2
Region 3: $2
Region 4: $3
Region 5: $5
Region 6: $3
 Regions 1-6, except Jamaica, add:
  +$46 (IEEE-USA) + $3 (ABET)
Region 7: $19
Region 8: $13
EU/EFTA countries (EPPI): R8 + $5
Region 9: $4
Region 10: $5
Japan: R10 + $25

Each HG Member sees a bundled price for HG base dues & assessments:

Total Dues Paid $
Includes:
 Base Dues = $
 Region Assessments = $
 Other Assessments = $

Each Student Member sees a price that is only base dues

Each Life Member has dues & assessments waived and receives basic membership services and publication(s) at no charge. Products and services for Life Members are subsidized by dues-paying members.

*Funds collected are passed to each Region, OUs, or activity and are expended in accordance with their charters.

Allocations from Base Dues & Region Assessments serve both HG and student members (full or as reduced)

IEEE Educational Activities

IEEE Spectrum Magazine

Membership recruitment, retention

Membership programs, products, services

Member Services

Local IEEE Region Activities

Local IEEE Section Activities

Support for IEEE Corporate Activities

Other Assessments are allocated as paid (full or as reduced)

European Public Policy program for EU/EFTA members

IEEE-USA programs & services for US members

Support for IEEE/ABET university accreditation activities

How are Member Dues for Members in Region 10 Collected and Applied?

Base Member Dues

Higher Grade
Full = $151

Students (No Assessments)
Region 10: $27

Region & Other* Assessments

Region 10: $5

Region 10 Member Full dues sees:

Total Dues Paid $156

Base Member Dues = $151
Region Assessment = $ 5

Region 10 Student Member sees:

Total Dues Paid $27
Base Member Dues = $27

Allocations from Base Dues & Region Assessments (full or as reduced)

IEEE Educational Activities

IEEE Spectrum Magazine

Membership recruitment, retention

Membership programs, products, services

Member Services

Local IEEE Region Activities

Local IEEE Section Activities

Support for IEEE Corporate Activities

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*Funds collected are passed to each of these Regions, OUs, or activities and are expended in accordance with their charters.

How are Member Dues for Japan Based Members in Region 10 Collected and Applied?

Base Member Dues

Higher Grade
Full = $151

Students (No Assessments)
Region 10: $27

Region & Other* Assessments

Region 10: $5

Japan: $25

Japan-based Member Full dues sees:

Total Dues Paid	$181
Base Member Dues =	$151
Region Assessments =	$ 5
Japan Sections	= $ 25

Japan Student Member sees:

Total Dues Paid	$27
Base Member Dues =	$27

Allocations from Base Dues & Region Assessments (full or as reduced)

IEEE Educational Activities

IEEE Spectrum Magazine

Membership recruitment, retention

Membership programs, products, services

Member Services

Local IEEE Region Activities

Local IEEE Section Activities (including Japan)

Support for IEEE Corporate Activities

*Funds collected are passed to each of these Regions, OUs, or activities and are expended in accordance with their charters.

Member Base Dues & Assessments are Allocated Across IEEE

Areas Receiving Allocations	What is Supported Through Allocations
IEEE Educational Activities	Via IEEE eLearning members have access to the latest on core and emerging technologies; engaging resources for pre-university students, educators, parents, and volunteers, including TryEngineering.org, TryComputing.org, Engineering Projects in Community Service (EPICS) in IEEE; IEEE-HKN recognition and programs
IEEE Spectrum Magazine	Monthly, award-winning *IEEE Spectrum* reveals unique inside looks at technology and beyond. IEEE Spectrum Online extends the knowledge to blogs, webinars and multimedia content. *The Institute* is a member newsletter that features stories about IEEE activities, member profiles, conference information, important member dates and deadlines, IEEE election news, and career guidance.
Membership recruitment and retention	Membership recruitment and retention strategies and implementation. e.g., promotions, outreach, new member programs, corporate partnerships; essential member research; membership year join and renew processes
Membership programs, products, services	Relevant benefits and offerings for members, including career resources, professional development opportunities; products and services for students (IEEE Potentials, IEEEXtreme); Women in Engineering (Int'l Leadership Conference, local Summits), Senior Member elevation and recognition, IEEE.tv; awards programs, Sections Congress, volunteer committee support including information management tools and geographic unit training resources (Center for Leadership Excellence); ongoing support for geographic units (vTools).
Member Services	Essential support team assists members in joining IEEE, renewing annually and in fully engaging throughout IEEE.
Local IEEE Region Activities	IEEE Regions conduct conferences globally that provide venues for members to convene for technical and professional programs and networking. Conduct annual operating meeting for volunteer leaders
Local IEEE Section Activities	IEEE local geographic units--Sections, Chapters, Affinity Groups, and Student Branches--provide unique opportunities for members to participate locally in relevant educational, technical and professional programs; create strong peer-to-peer connections through in-person networking; and participate in leadership opportunities that can make a positive distinction in IEEE members' jobs and careers.
Support for IEEE Corporate Activities	IEEE Fellows Program, humanitarian programs, corporate awards programs, board and committee governance

2019 Dues and Assessment Allocations

Allocations provided to	Additional details

Allocations from Assessments *(only HG members pay)* **$6.7M**

Other assessments: $5.2M

Geo assessments: $1.5M

Allocations from Base Dues *(all members pay)* **$32.5M**

Bylaw: 12% of dues for Geo Units: $4.0M

2019 Budget for Member & Geo Activities: $14.5M

2019 Budget for Education Activities: $5.4M

Financial Ops Manual: 7.5% of dues towards corporate activities $2.4M

2019 Budget for IEEE Spectrum: $6.4M

10 Regions: $1.3M
Japan: $0.2M

Sections, Chapters, Student Branches: $3.0M

Region Allocation: $1.0M

IEEE-USA: $4.7M
ABET: $0.3M
EPPC: $0.2M
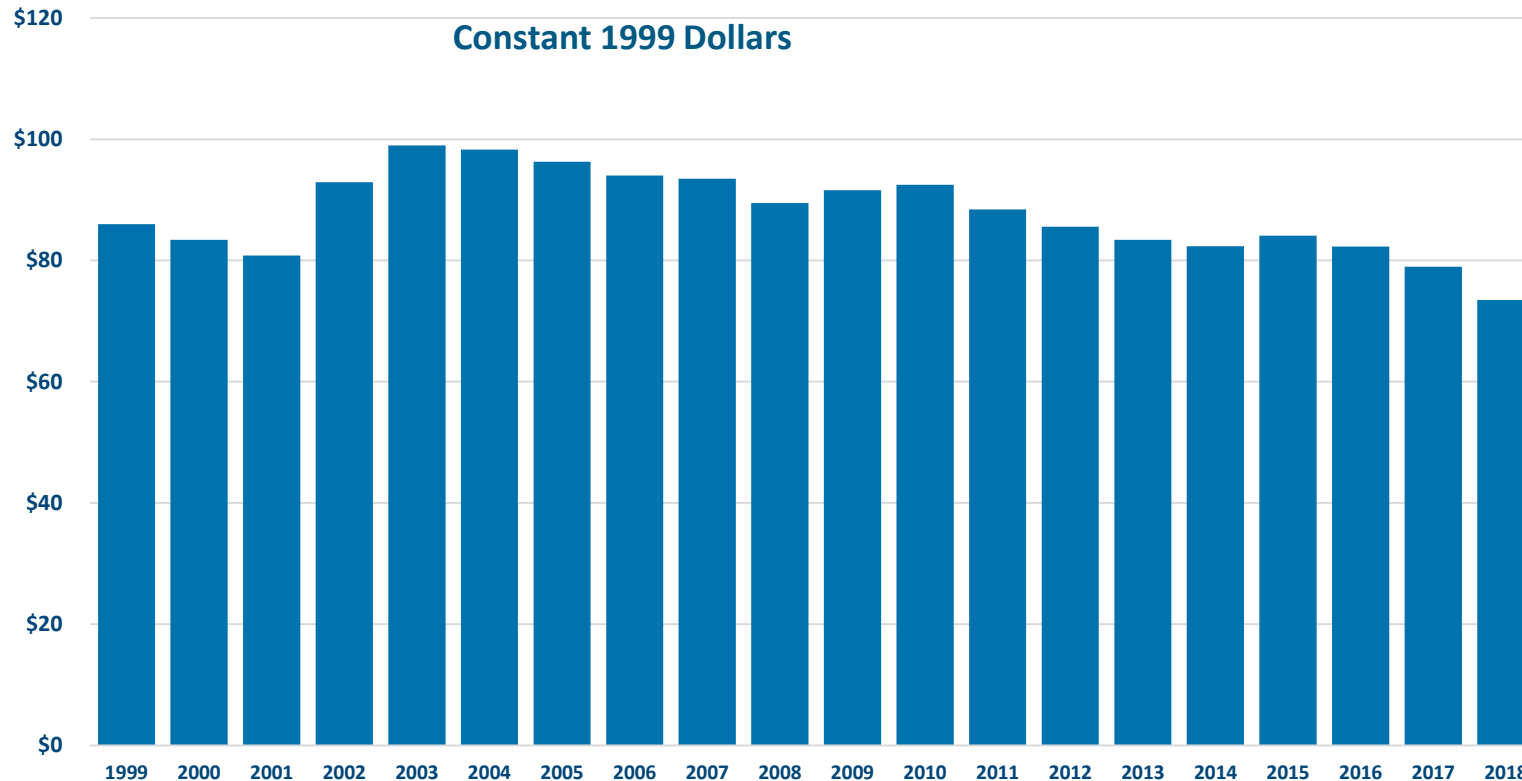
$3.2M to Sections

$5.5M to Geo Units

$2.3M to Regions

MGA Prog, Prod, Svc $6.8M
Member Services $4.8M
Membership (recruit, retain) $3.7M

$6.4M Subsidy to Spectrum from dues + $5.7M for Spectrum from Pubs

$12.1M Total Spectrum Cost

Member Dues Rate Adjusted for Inflation
Purchasing Power of the Current Dues Rate Continues to Decline

Constant 1999 Dollars

Net across the membership, dues buying power has been declining over time, which has led to a slow, ongoing reduction in services to members effectively
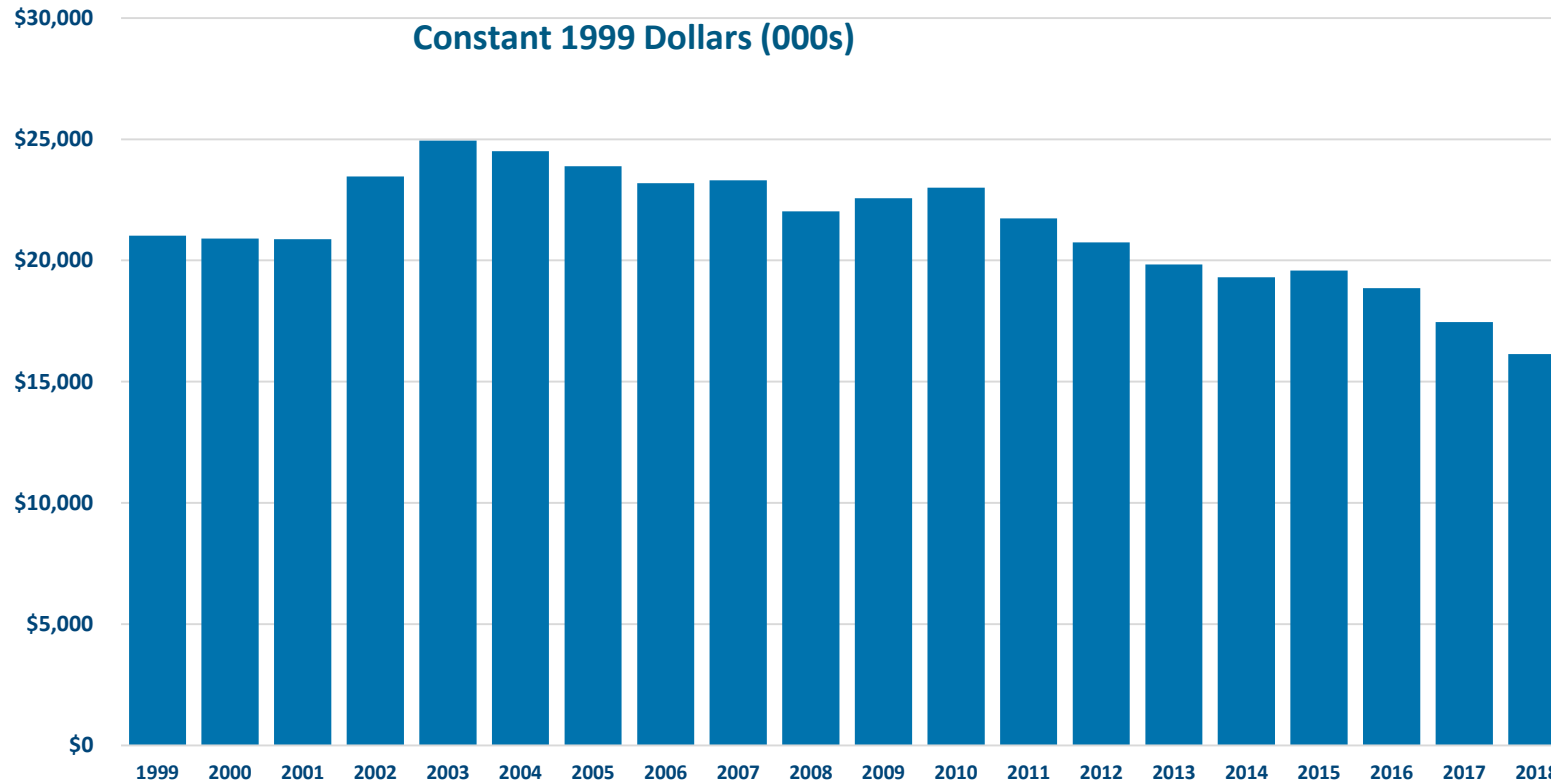
This is most evident in IEEE-USA, which has significantly reduced its program as a result of falling revenue

Member Dues Revenue Adjusted for Inflation

Purchasing Power of the Current Dues Revenue Continues to Decline

Constant 1999 Dollars (000s)

Net across the membership, dues revenue buying power has been declining over time, which has led to a slow, ongoing reduction in services to members effectively

This is most evident in IEEE-USA, which has significantly reduced its program as a result of falling revenue

What If...

Impact of a $100/$10 (HG/Student) Cap on IEEE Member Dues & Assessments

2019 Membership Revenue
(Global Dues & Assessments)   = **$39.2M**

2019 Membership Revenue
(IF Global Dues & Assessments Capped
at $100 HG/$10 Student Member)   = **$23.0M**

                                                                 _____

                                                                 $16.2M (Deficit)

Options to Cover a $16.2M Deficit Annually

1) Reduce member programs and services to cover the shortfall
2) Impact other IEEE programs, beyond those currently receiving allocations from dues & assessments, to cover the shortfall

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