

CHAIR'S COMMENTS:

SUPERCHARGE YOUR CONSULTING NETWORK!



BY CHARLES J. LORD, P.E.



Does your local IEEE Section have a Consultants Network (typically an affinity group)? If not, starting a local IEEE Consultants Network in your section can offer numerous benefits to both individual members, and your IEEE section as a whole. Here are some compelling reasons to

consider initiating such a network:

- 1. Professional Development:** A Consultants Network provides a platform for engineers, technologists and professionals to share knowledge, expertise and experiences. It fosters continuous learning and professional development by hosting seminars, workshops and training sessions on various technical and business topics. A Network is extremely valuable in states that require professional development hours to maintain PE licensure!
- 2. Networking:** It offers an opportunity to build a strong professional network within the IEEE community,

and beyond. Consultants Networks often attract a diverse group of members from different industries and sectors, facilitating valuable connections and collaborations. We can't all be experts in every topic, and knowing who you can turn to for collaboration or referral is critical to help build and maintain your pool of clients (see item 4 below).

- 3. Business Opportunities:** Consultants can use the network to promote their services and expertise. It serves as a marketplace where members can refer or subcontract work to one another, potentially leading to new business opportunities and partnerships. One function that many networks provide is a local webpage member listing to help potential clients find you. Although the premium IEEE Consultants Network and the [IEEE-USA Consultant Finder](#) are excellent tools for getting your name out on an international scale, making yourself known locally can be equally valuable to getting that next client.
- 4. Knowledge Exchange:** Consultants often possess specialized knowledge in their respective fields. The network can serve as a platform for knowledge

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sharing, allowing members to exchange insights, best practices, and solutions to technical and business challenges. One pool of speakers that sometimes get overlooked for local networks are business-related experts: local SBA (small business administration), SCORE, tax and financial experts, and lawyers.

5. **Mentorship and Support:** Established consultants can mentor and guide newcomers in the field, helping them navigate the complexities of consulting work. This mentorship can be invaluable for early-career professionals looking to establish themselves. Many of us got our start in consulting under such mentorship, and we need to pay it forward to the next person starting out.
6. **Visibility and Recognition:** Being part of a local IEEE Consultants Network can enhance your professional visibility and credibility. It demonstrates your commitment to the IEEE community, and your dedication to upholding high professional standards.
7. **Collaborative Projects:** The network can facilitate collaborative projects among members, allowing for the pooling of resources, expertise and manpower to tackle larger and more complex ventures. My former network had a large number of Mechanical Engineers as members; and we often worked together to give clients a ‘one stop shop’ for solutions.
8. **Access to Resources:** Local IEEE Consultants Network members may have access to resources, such as industry reports, market trends and tools that can help them stay informed and competitive in their consulting businesses.
9. **Community Engagement:** Building a Consultants Network can strengthen an IEEE Section’s engagement with its local engineering and technology community. It demonstrates the section’s commitment to supporting professionals in the region. The network should be reaching out to student members and young professionals, so they can learn more about consulting as a future career.
10. **Promoting Ethical Practices:** The network can promote and uphold ethical standards within the

consulting industry, emphasizing the importance of integrity, professionalism, and quality of service. Part of network membership should include the same dedication to the IEEE Code of Ethics as your membership does.

11. **Local Impact:** By creating a local network, you can focus on the specific needs and challenges of your local area. This focus allows for tailored programming and support that addresses the unique characteristics of your section’s area. And remember — as much as we publicize the [IEEE-USA Consultant Finder](#), some clients (particularly startups) are more likely to look for local listings to find help.
12. **Resource for Industry and Government:** Local IEEE Consultants Networks can become a valuable resource for local industries, government bodies and organizations seeking technical expertise and consultancy services. We talk about government relations a lot in IEEE-USA, and that includes asking your representatives “What can I do for you?”

The process is easy (yes — really!). You should first approach your Section Chair to make sure you don’t already have a CN that is dormant; and ensure your section approves your starting the affinity group. Once approved, you can simply go to [Formations & Petitions - IEEE Member and Geographic Activities](#) and follow the simple directions. Our hardworking staff will take care of the petition for you! As the organizer, you will be the de facto chair for the first year of the network, until you hold elections, or the section chair appoints a replacement. That’s it! IEEE’s committee is ready to assist you in getting started, and making your network successful, once it becomes official. Feel free to contact me at c.j.lord@ieee.org for help, and more information.

Starting and sustaining a local IEEE Consultants Network may require a bit of effort and commitment, but the benefits it can bring to both individual members, and your IEEE Section, make it a worthwhile endeavor. It can foster professional growth, create opportunities, and contribute to the overall advancement of the engineering and technology community in your region. Supercharge your network today! ■

ANNUAL IEEE-USA CONSULTANTS SURVEY SHOWS NUMBER OF MEMBERS DEPENDENT ON CONSULTING DOWN, RATES AND BILLING HOURS FLAT



BY PAUL LIEF ROSENGREN

Have you thought about striking out on your own as an engineering consultant? Are you a manager who might have to hire a consultant in the coming year? Or are you a longtime consultant; and you want to see how your rates compare to those in your area, or with your experience? Then you should consider purchasing the *2023 IEEE-USA Consultants Fee Survey Report*.

Interestingly, while the number of U.S. IEEE members grew last year, the number reporting that 50 percent or more of their income came from consulting, decreased almost 19 percent over last year's survey. The report concluded, "This decrease can be seen as a sign of a robust economy offering more permanent jobs to engineers — and reducing the need for, or appeal of, consulting." The report also noted a decrease in the number of IEEE-USA members reporting unemployment.

The report shows that the median hourly rate consultants charge (\$180) is unchanged from 2022, after rising a total of \$40 in 2020 and 2021. Fee-based consultants holding a Ph.D., or an MBA, continue to be able to charge more for their services, reporting a \$25 advantage in average hourly rates. Two in 10 consultants hold a Ph.D., or equivalent, as their highest degree. Almost four in 10 hold Masters.

The median number of weekly hours billed was also flat (holding at 20 hours) from 2022 (five hours lower than in 2021).

The report is chock full of information, showing rates charged by quartile based on engineering experience; consulting experience; educational level; client sector; professional experience (by sector and by lines of business); and by U.S. Census regions. Consistent with the previous two years, fee-based consultants (with

clients exclusively in Utilities), report the highest median hourly rate (\$200). Consultants with offices in the Pacific and Middle Atlantic regions charge higher rates; while consultants in the West South-Central region charge below the countrywide average.

The most common areas respondents offer consulting services in are (respondents could pick multiple areas): Systems Engineering (34%), Project Management (27%), Management (25%) and Electrical Power Systems (24%).

Some other selected results of the survey include:

- More than half of the consultants in the 2023 survey worked for three or fewer clients in 2022.
- More than four out of five (82%) consultants used their home office for their work, consistent with last year, but up six percentage points from 2021.
- Four in ten respondents (41%) worked solely as independent consultants, consistent with 2022.
- Twenty percent of respondents have been consulting for 25 years or more, significantly less than the 29% in 2022.
- On average, consultants have 23 years of professional experience before consulting; and 16 years of consulting experience once they began consulting.

In the spring, roughly 10,000 IEEE members, identified as consultants in the IEEE membership database, were emailed the *2023 Consultants Fee Survey*. Approximately 7.8% responded, up slightly over the past year. For most questions, the report only included responses from those indicating that more than 50 percent (or more) of their income came from consulting. As with the IEEE membership in general, the vast majority of consultants identify as male (91%). ■

UNDERSTANDING PROFESSIONAL LIABILITY STEP RATE FACTORS

BY JIM JACOBSEN

Professional Liability and Step Rate Factors

Step rating is one of the least understood aspects of the engineer's professional liability policy. Professional liability step rating is a system used in the insurance industry to assess the risk associated with providing professional engineering services. While it may come as a surprise to some first-time policyholders, this step rating system plays a crucial role in determining the premiums that technologists and engineering firms pay for their professional liability insurance coverage. Understanding the reasoning behind this step rating system is essential for both technologists and insurance providers.

What is Step Rate?

Insurers implement step rating to recognize that the longer an engineer is in practice, the more exposure is created. Step rating allows insurers to match the premium charged to the risk of a claim being made.

As the carrier assumes more prior acts coverage, the premium increases incrementally — generally done by using “step factors” applied to the premium. In the field of engineering, this process recognizes that the longer a given technologist is in practice the more exposure is created. Increased exposure occurs due to the greater number of services provided; the number of clients served; and increasingly, related projects. Since each subsequent year of coverage represents a higher exposure, professional liability insurers use incremental rates or steps.

If you have never been insured, you carry no insurable (or covered) past risk exposure. With step rate, the first year of coverage is the most discounted because only one year of coverage is being provided during which a claim can be filed against you or your firm. The likelihood that a technologist will take on a project,

commit an error, and have the client file a claim — all during the one-year policy period — is generally, rare.

However, once you have carried a professional liability insurance policy for more than a year, you begin to build up and carry more exposure. At the first renewal, the premium will increase — due to an additional year of coverage being provided; or two years of coverage, during which a claim could come against you. The premium continues to increase each year, because the likelihood of having a claim increases with each additional year of coverage.

Factors That Affect Step Rating

Several factors can affect step rating and may include the number of technologists in the firm, dates of hire, areas of practice, the insurer's rates, any limits of liability, and the deductible chosen. Claims history and lawsuit frequency are also factors influencing technologists' professional liability step rating. Insurance providers analyze the number and severity of prior claims made against the technologist or firm to assess the likelihood of future claims.

Other factors can also affect premium increases, including: additions or subtractions to the firm's employee roster, changes to the policy limits and deductible, the firm's areas of practice, revenues, claims history, interest rates, and inflation.

Keep in mind most insurers calculate a premium for the firm's individual technologists, and a premium for the firm as a whole — then combine them to get the final premium. While step rating applies to all technologists, solo technologists buying their first professional liability policy may especially notice the increases, particularly in the first three years — when the increases are typically larger, and the premium is smaller. However, after the fifth year, they won't continue to see the effects, as the firm is considered mature.

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What Step Rate Means For Your Engineering Business

In the end, premium increases can be very confusing for the insured, especially if the reason behind it isn't properly explained or understood. Insurance providers use step ratings to determine the appropriate premiums to charge, based on the level of risk associated with providing engineering services. This relationship allows insurance providers to accurately assess the risk associated with providing technologists services and adjust the premiums accordingly. Additionally, the significance of experience and expertise in a given

discipline help determine step rating and reinforces the logic behind this rating system.

IEEE consulting members, and those considering the opportunity to become self-employed — or even those considering undertaking a single consulting project, can learn more about their exposure to risk (and ways to mitigate exposures with contracts and insurance,) in addition to prudent business practices. You can find these resources in the IEEE [Risk Management Hub](#). Information about the professional liability insurance and related policies, as well as the online application for coverage, are at [IEEEinsurance.com](#). ■

RENEW YOUR SUBSCRIPTION TO THE IEEE-USA CONSULTANT FINDER



You still have time to renew your subscription for the [IEEE-USA Consultant Finder](#). IEEE Collaboratec powers the IEEE-USA Consultant Finder for IEEE members.

This service's key features include:

- Simple and advanced search features
- An assignment placement portal
- A full consultant profile for paid subscribers

The main purpose of the IEEE-USA Consultant Finder is to let clients, project managers and HR professionals search for consultants to hire — for free!

The IEEE-USA Consultant Finder's visual design makes it easy to use. It also has web crawlers, so even more potential clients will be able to find this website — and individual consultant profiles. IEEE-USA is also actively trying to promote this service to professionals through Google ad words, as well as constantly updating Search Engine Optimization (SEO) tags.

All IEEE members considering, or jumping into, the world of the gig economy should check out the IEEE-USA

Consultant Finder for marketing their services. This includes international independent consultants (those working outside of North America).

The IEEE membership renewal period is the best and easiest time to get started. When you renew your IEEE membership, just add the [IEEE Consultants Network Membership Premium](#) to your cart. This step allows your IEEE Collaboratec profile to be listed in the IEEE-USA Consultant Finder.

We look forward to your continued support of this product with you subscribing or renewing your subscription.

Please note: Current Membership Premium subscribers — it is now a great time to review your consultant profile. Log in via IEEE Collaboratec (or the IEEE Collaboratec App) — and consider adding, or updating, your photo; reviewing your biography; and updating your desired salary, or hourly rate. ■

AICN Newsletter

The Quarterly Publication of the Alliance of IEEE Consultants Networks



CONSULTING ISSUES IN THE NEWS

PROVISION OF THE *SECURE ACT. 2.0* THAT MAY AFFECT CONSULTANTS

The Freelance Union reports that the *SECURE Act 2.0* contains some critical impacts for freelance businesses with a solopreneur owner, as well as those freelance businesses with employees. Click this [link](#) to read about these provisions.

ChatGPT Isn't Coming for Your Coding Job

New technologies have long promised to make human software engineers redundant. But developers have only gotten more important over time. [Read here](#) why the rise of AI will most likely assume the role of all its predecessor technologies — reducing grunt work so that good, creative programmers/engineers/consultants can focus on the more abstract issues.

How “Soft Power” Branding Strategies Help To Lift Freelance Marketplaces

Author Joseph Nye Jr. coined “soft power” in the 1980s, defining it “as the ability to influence others without resorting to coercive pressure.” In this *Forbes* magazine article, they describe 10 ways that freelance platforms can successfully build and use soft power. [Read on!](#)

Webinar: Building Strong Strategic Networking Skills Builds a Successful Career

As a follow-up on the Soft Power story, IEEE-USA recently held a webinar on “[Building Strategic Networking Skills.](#)” Skill training provided in that presentation goes hand in hand with the 10 ways to build and use your “Soft Power.” [Check it out!](#)

NEW IEEE-USA E-BOOK EXPLORES GROWING CYBER THREATS, ROLE OF CYBERSECURITY PRODUCT MANAGER

Engineer-turned-cybersecurity-product-manager Abhishek Bansal taps into his passion for using technology to solve real-world problems in a new IEEE-USA E-BOOK (free for members), *A Comprehensive Guide to Cybersecurity Product Management*. Bansal discusses current cybersecurity trends, and the role a cybersecurity product manager plays in developing and launching new cybersecurity tools and strategies. The author clearly believes this is a good career choice, discussing the skills needed to succeed as a cybersecurity project manager. Visit: <https://ieeusa.org/product/a-comprehensive-guide-to-cybersecurity-product-management/>

