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Connecting the Future with Any Media Communication: NESSUM Alliance's Groundbreaking Technology Incorporated in International Standard IEEE 1901!

Harnessing Diverse Communication Media to Drive Innovation in the IoT Society

FUKUOKA, Japan - In a groundbreaking stride toward advancing communication standards in the digital age, the NESSUM Alliance is proud to announce the release of the IEEE 1901c standard on May 15th. This transformative standard, created from the collaborative efforts of NESSUM's esteemed members, now stands poised to redefine connectivity paradigms worldwide, under the rebranded banner of NESSUM.

With the introduction of IEEE 1901c, formerly known as 'HD-PLC,' NESSUM introduces many new and unparalleled features:

- **Long-Distance Communication:** Spanning several kilometers, NESSUM enables a new era of expansive reach.
- **Broadband Communication:** Operating in the Mbps class, this standard ensures seamless transmission of data across networks.
- **IP Compatibility:** Using standardized Internet Protocol (IP), NESSUM seamlessly integrates with existing infrastructures.
- **Topology-Free Configuration:** Facilitating flexible networking, NESSUM overcomes conventional constraints of network configurations.
- **Safety and Security:** Prioritizing network and user safety, NESSUM ensures robust and secure communication channels.

Besides high-speed communication on any wire, NESSUM technology also enables the transmission of weak radio signals, facilitating short-range wireless communication applications, including underwater environments. This makes it a truly versatile solution for any media.

The IEEE began the development of the any medium communication standard for IoT applications as IEEE P1901c in May 2022, including the adoption of the Wavelet OFDM method - one of the advanced feature sets of NESSUM's technological advantages compare to other (power line) solutions. After months of effort and refinement, IEEE 1901c attained formal approval in February of this year, marking a monumental leap forward in communication standards.

Mr. Jean-Philippe Faure, Chair of the IEEE 1901WG, lauded the contributions of NESSUM Alliance's expert members, affirming, "This new standard expands the application range of powerline communication to various existing lines and supports low-power radio, opening up new possibilities for high-speed short-range wireless communication."

Agreeing to this sentiment, Mr. Hiroshi Saijo, Head of Business Development & Strategy at Panasonic Holdings Corporation, articulated a shared vision of global proliferation, stating, "We aim to spread this IoT communication standard worldwide as an international standard, not only in products but also in applications."

Mr. Keishi Kajiwara, Director of the Communication Business Division at MegaChips Corporation expressed eager anticipation for market expansion and collaborative endeavors with the new standard, NESSUM's pivotal role in driving innovation.

Mr. Christopher Trabold, CTO and Business Development Leader for Asset Monitoring and Communication at General Electric Vernova, emphasized the burgeoning demand for powerline communication with the digitalization of power infrastructure, signaling a promising trajectory for IEEE 1901c.

IEEE 1901c's transformative capabilities extend to long-distance powerline communication, now covering the several hundred kHz band as NBPLC through innovative resampling. This evolutionary leap finds resonance in diverse sectors, from medium-voltage system control to smart meters, with new applications in Asia and beyond.

Mr. Markus Rindchen, Head of Technology Management at Power Plus Communications AG, pointed out the indispensable role of NESSUM in Germany's Smart Meter Gateway business, underscoring its essential role for the mass roll-out.

Mr. Tomislav Drenski, Marketing Manager at Socionext Europe GmbH is excited to promote the new NESSUM ICs. These advanced ICs offer unique features such as high speed, stable and secure long-distance communication, which surpass other power line solutions available in the market.

With a strong long-term commitment to meet evolving market demands and continuously develop innovation in the IoT landscape, the NESSUM Alliance promotes and supports Any Media communications being inter-operable worldwide. Through a multifaceted approach encompassing webinars, seminars, exhibitions, and extensive promotional activities, the alliance is confident and certain to drive future state-of-the-art solutions with increased compatibility, and lead international standardization efforts.

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