

**Benoit Derat**



**Position Statement:**

It is a great honor to be nominated as a candidate for the AMTA Board of Directors (BoD). From my experience in and passion for antennas and electromagnetic measurements, I feel that I have found a real scientific home in the AMTA community. The AMTA is gathering an outstanding amount of expertise and provides qualitative technical inputs to both the academic and industrial worlds. I have particularly enjoyed over the years the positive attitude and engagement of its members. Our association has a lot to offer in sharing and learning from each other. Our members are for me like sparring partners that constructively challenge research findings to always further develop the state-of-the-art in antenna measurements.

If elected, it will be for me a privilege to serve on the BoD and build on the fantastic AMTA legacy, contributing to its growth, excellence and impact across various industries.

In my career, I have had the chance to take part in the research and development of characterization techniques involving antenna measurements for a wide variety of applications from antenna design for mobile phones to radiofrequency human exposure evaluations, over-the-air (OTA) performance assessment for wireless infrastructure or automotive connectivity, electromagnetic compatibility, radiated spurious emissions, etc... This 20+ years journey gave me the unique opportunity to bond and collaborate with a large and diverse group of high-level experts worldwide, and support, together with my teams, with impactful contributions to standards development at the IEC, IEEE, ANSI, 3GPP or CTIA. If elected, I intend to work with the BoD and leverage my experience and network to further grow the AMTA membership and increase the attendance to the Symposia. In particular, I will use my best abilities to achieve this goal by supporting an increased reach and diversification of the AMTA across industries (wireless, automotive,...), regions (Europe, Asia) and applications (OTA, human exposure, regulatory testing,...).

The AMTA organization has prosperous days ahead in our all-connected world. Commercial wireless technologies developing towards the sky with Non-Terrestrial Networks (NTN) or foreseen to expand with 6G to the sub-THz range; car connectivity and cellular-V2X requiring new OTA SISO (Single Input Single Output) and MIMO (Multiple Inputs Multiple Outputs) vehicle-level test methodologies which will be a cornerstone to guarantee adequate performance of advanced driver assistance systems (ADAS), and many more key topics driving major companies investments in future technologies, all deeply associated with antennas and integrated transceivers, where the core of AMTA's expertise and its members' creativity will be needed to provide the base for technically sound, well adapted and accurate antenna characterization techniques. In my current role at Rohde and Schwarz and with my experience in antenna measurements linked to multiple industries and applications, I will offer my best

to support that the AMTA is seen as a key contributor in these major technology trends where antennas are involved, possibly growing the impact of the association at relevant standards organization.

It is animated by a strong collaborative mindset that I wish to join the excellent AMTA BoD and bring value through my communication skills, leadership experience, and entrepreneurial approach. I thank in advance every member supporting me with his or her vote to serve on the AMTA BoD and contribute to the growth, excellence and industrial impact of the association.

### **Biography**

Benoit Derat has over 21 years of experience in antenna design, numerical and analytical modelling, as well as antenna measurements. On the latter topic, Benoit has lead the research and development of near and far-field assessment techniques, and the realization of tens of commercial products and associated solutions implementing a wide range of characterization technologies, including e.g. miniature probe-arrays, compact antenna test range, plane-wave synthesis, near-field transformations, etc... Since 2017, he is exerting his technical and leadership competences as Senior Director for solutions developments and customer project implementations at Rohde & Schwarz (Munich, Germany), focusing on Electromagnetic Compatibility, Over-The-Air and antenna test applications. Before joining R&S, he founded ART-Fi (Orsay, France), the company that created the first vector-array Specific Absorption Rate measurement system and originated the IEC 62209-3 international measurement standard for human exposure evaluation. Benoit was both the CEO and President of ART-Fi starting in 2010. Earlier, he worked for seven years long as an antenna and electromagnetics research engineer at SAGEM Mobiles, contributing to the development of the radiofrequency design of commercial mobile phones. Benoit has so far authored more than 80 scientific conference and journal papers and is an inventor on more than 40 patents. He received an engineering degree from SUPELEC (Gif-sur-Yvette, France) in 2002 and a Ph.D. degree in physics from the University of Paris XI with honors in 2006.

### **Candidate Speech**

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