MFA

July 15, 2021

Letter from leadership

I'm excited to share that MFA (previously MulteFire Alliance) has expanded its scope to support 5G private networks by delivering Uni5G Technology Blueprints. These blueprints will help enterprises select and implement the key features from the 3GPP 5G specifications that are relevant to their specific use cases. With these Blueprints, we hope to provide guidance to industry verticals seeking to deploy 5G private networks and help them understand the many spectrum options available. As the Alliance's mission has expanded to 5G, it has been rebranded to better reflect this technology evolution – and will now be referred to as "MFA." Get acquainted with our updated mission and visuals at mfa-tech.org.

To add to this news, MFA has also been awarded a global Public Land Mobile Network (PLMN) ID by the International Telecommunication Union (ITU). With the addition of Uni5G Technology Blueprints and the availability of a unique PLMN ID, enterprises can now efficiently deploy their own optimized, reliable and secure private network using MFA-defined MulteFire specifications for LTE in unlicensed spectrum as well as Uni5G for 5G in locally licensed spectrum today and, once NR-U is available, also for 5G in unlicensed spectrum.

In addition to the rebrand, we hit another major milestone this year with Nokia's announcement of its Nokia Industrial MulteFire router 700 user equipment and Nokia MulteFire radio access point to enable private wireless networks. These solutions – certified by MFA – are the first commercial MulteFire solutions in the market.

I encourage you to get involved with our technical, certification and marketing working groups to support MFA in our next phase. Also, be sure to follow MFA on Twitter and LinkedIn for the latest information on industry events, white papers, webinars and more.

Sincerely,

Mazen Chmaytelli
MFA President

In this issue:

MFA announces Uni5G™ Technology Blueprints for enterprise 5G private network deployment

MFA awarded with global Public Land Mobile Network (PLMN) ID by the International Telecommunication Union (ITU)

Nokia MulteFire solution unlocks global unlicensed spectrum for private 4.9G/LTE

Uni5G and MulteFire Private Networks for Manufacturing

Beecham Research "5G Private Networks for Maritime Use: Opportunities for Digital Port Automation" – white paper

Upcoming events

Past events

MFA liaison spotlight

Resources

MFA in the news

MFA announces Uni5G™ Technology Blueprints for enterprise 5G private network deployment

On June 22, MFA announced Uni5G™ Technology Blueprints, which are based on existing 3GPP 5G specifications and help provide guidance to enterprises looking to deploy private 5G networks in unlicensed, shared and locally licensed spectrum. MFA first released MulteFire in 2017 to enable industries to deploy their own private network using 4G/LTE-based technology. Now, with Uni5G Technology Blueprints, MFA will provide industry verticals with targeted private 5G deployment guides and help determine which spectrum option is right for their specific site.

Learn more about Uni5G by reading the official press release and visiting the Uni5G Technology Blueprints page. For more information on MFA and MFA technology, take a look at our FAQ.

MFA awarded with global Public Land Mobile Network (PLMN) ID by the International Telecommunication Union (ITU)

The ITU has awarded MFA with a global PLMN ID, a series of numbers that identifies a specific network and ensures that only authorized devices connect to that network. Enterprises can bundle the unique PLMN ID with their network equipment to seamlessly deploy their own Uni5G or MulteFire (4G) private network.

MFA will make its unique global PLMN ID available to enterprises, so they can readily deploy their own 5G private network in locally licensed spectrum today, as well as in unlicensed or shared spectrum once 5G NR-U solutions become available.

Learn more about the MFA PLMN ID by reading the official press release.

Nokia MulteFire solution unlocks global unlicensed spectrum for private 4.9G/LTE

On June 30, MFA founding member Nokia announced the availability of its new, industry-first MFA certified 4.9G/LTE private wireless networking solution. The Nokia Industrial MulteFire router 700 solution reduces dependency on commercial networks and offers increased coverage, security and reliability regardless of location or licensed spectrum availability. With this solution, MulteFire has the potential to significantly contribute to global private wireless networking adoption. Learn more by reading the official press release.

Uni5G and MulteFire Private Networks for Manufacturing - new video

Many industrial IIoT needs, especially in manufacturing, are best served with high-performance cellular networks. Watch our new educational video to learn how MFA enables manufacturers to easily deploy and operate their own secure 4G/LTE or 5G private network to accelerate their digital transformation, utilizing MulteFire and Uni5G Technology Blueprints.

Beecham Research "5G Private Networks for Maritime Use: Opportunities for Digital Port Automation" – white paper

In an MFA-sponsored white paper, Beecham Research assessed the connectivity requirements for port operations, which included interviewing operations managers responsible for port activities in different locations worldwide. The study confirmed that 5G Private Networks (5G PNs) operating in unlicensed spectrum offer significant opportunities for port automation in the Maritime sector. Download the white paper to learn more about the study, maritime use cases, spectrum options and projected use of 5G in ports.

Upcoming events

Uni5G Private Networks: A Simplified Path to Deployment **– July 21, 2021, Webinar**

In partnership with RCR Wireless, speakers from MFA and Beecham Research will highlight the private network opportunity in unlicensed, shared and locally licensed spectrum. Webinar attendees will learn how MFA is enabling a simpler path to deployment through the delivery of Uni5G™ Technology Blueprints. Uni5G, based on 3GPP 5G specifications, will help enterprises select and implement the key features from the 3GPP standards specific to their deployment.

Join speakers Asimakis Kokkos, MFA Specification Work Group Chair and Robin Duke-Woolley, Beecham Research CEO, on July 21 at 8:00am PT. Register today.

Connectivity Expo - Connect (X) **– October 4-7, 2021, Orlando**

Connect (X) will showcase the leaders of 5G, covering key themes such as 5G infrastructure and the emergence of private LTE for enterprise. MFA will attend Connect (X) this fall to network and educate industry buyers, end-users and thought leaders on the benefits of private wireless connectivity.

Attendees will be able to stop by the MFA booth #706 to learn more about MFA's expansion to 5G with Uni5G Technology Blueprints and speak with MFA experts about the MFA roadmap for 2021 and beyond. For the most up-to-date event info, visit the MFA event page.

5G Manufacturing Forum **– November 9, 2021, Virtual**
MFA is a platinum sponsor for year's event which will include a packed schedule focused on deploying scalable and flexible 5G networks for the manufacturing industry and related topics. Sign up to learn more here.

Past events

MFA has participated in several virtual industry events this year, with the goal of educating targeted verticals on the benefits of MulteFire and Uni5G. We also engage with interested attendees beyond these events that opt in to learn more about MFA technology updates, new white papers, upcoming events and more.

Hannover Messe Digital Edition – **April 25-29, 2021,Virtual**

MFA joined like-minded companies at the Hannover Messe Digital Edition to engage in discussions on the latest industry 4.0 and digital transformation trends. Hannover Messe attendees can still access the virtual MFA booth on-demand. During the show, MFA led a livestream event, presented by MFA Technical Specification Group Chair Asimakis Kokkos, titled "Unlicensed Spectrum for 5G Private Networks? The Answer is Yes!" The livestream recording will be available through July 31.

Container Terminal Automation Conference (CTAC) – **May 18-21, 2021, Virtual**

MFA was proud to be a Gold Sponsor for the CTAC this May. Attendees were interested in hearing the latest in port technology innovations and visited the MFA virtual booth to learn about the 5G private network opportunity for ports and logistics. Asimakis Kokkos participated in the "5G Networking: Taking Advantage of the New Standard in Connectivity" panel discussion. CTAC attendees can access the panel recording here. Learn more about the private 5G opportunity for ports on the MFA YouTube channel and download the presentation.

Manufacturing X.0 – **May 24-27, 2021, Virtual**

MFA participated as an Exhibitor Sponsor at the Manufacturing X.0 event. MFA educated attendees on adoption of private cellular networks, utilizing MFA-defined MulteFire specifications for LTE and Uni5G Technology Blueprints for 5G. Attendees can still access the MFA virtual booth here.

Private Networks Forum – **May 25, 2021, Virtual**

MFA was a Workshop/Roundtable Host Sponsor for the one-day Private Networks Forum event, which discussed private networks for enterprises in the Industry 4.0 era. Asimakis Kokkos led an engaging workshop discussion, discussing unlicensed spectrum use and options to be considered when deploying a private 5G network.

MFA liaison spotlight

OnGo Alliance:

- The OnGo Alliance is pleased to announce the publication of 'CBRS & OnGo for Dummies' - a digital ebook that includes information about LTE and 5G NR technology, which becomes more widely available for private networks through OnGo and sets the stage for new 5G solutions. This book offers specifics about industries that can benefit, applications that OnGo enables, and business models that can thrive in the world of CBRS. It also provides a general roadmap for getting started with implementation. Download OnGo for Dummies here.
- Watch OnGo Alliance's two-minute video that details how connectivity in the 3.5 GHz CBRS band can put the power of a high-performing wireless network in the hands of organizations today. Watch it here.

Industrial Internet Consortium (IIC):

- IIC announced the publication of the Global Industry Standards for Industrial IoT whitepaper to offer industry guidance in the development, adoption, and use of IIoT standards. The whitepaper outlines a vision and strategy to enable interoperability and system compatibility across the entire IIoT ecosystem.
- Patterns Initiative: the IIC IoT Patterns Initiative intends to crowdsource, review,

revise, and publish a library of high-quality and well-reasoned IoT patterns for use and reuse across industries. A pattern describes a recurring design or architectural problem in a specific context and offers an established scheme for its solution. IoT patterns include architectural designs to represent essential cohesive components and their assembly; and design patterns that illustrate solutions to specific problems.

Resources

- Beecham Research White Paper: 5G Private Networks for Maritime Use: Opportunities for Digital Port Automation
- ABI Research White Paper: The Importance of Spectrum Liberalization for Private 5G Networks
- Press Release: MulteFire Alliance (MFA) simplifies path to 5G private network deployment for Enterprise
- Blog: Why is Certifying MulteFire Devices Important?
- Blog: Private Cellular Enterprise Deployments to Generate $64 Billion in Equipment Revenues by 2030: ABI Research Explores the Private Cellular Market and Spectrum Options for 5G Deployments
- YouTube Video: MFA Manufacturing Use Case

MFA in the news

- Enterprise IoT Insights – MulteFire, finally – unlicensed LTE lifts off, rebrands, takes left-turn as 5G match-maker
- Enterprise IoT Insights – A MulteFire matrix for 'universal' private 5G – and how to fix the 'faulty' 5G supply chain
- Telecompaper - MulteFire Alliance to help companies deploy private 5G networks
- Converge! Network Digest – MulteFire Alliance offers Uni5G technology blueprints
- World Cargo News – MFA charts a path for private 5G networks
- Port Technology – MulteFire Alliance expands mission to 5G private network deployment for enterprise
- Port Technology – MulteFire Alliance supports maritime implementation of 5G
- IT Wire – Nokia MulteFire provides a solution for private 4.9G/LTE in unlicensed spectrum
- Land Mobile – Nokia Develops MulteFire Router to Broaden Unlicensed Spectrum Usage
- The Fast Mode – Nokia Unveils MulteFire 4.9G/LTE Private Wireless Solution
- 5G Technology World – Unlicensed spectrum use: What's the technology behind it?
- Capacity Media – Enabling Industry 4.0 through private wireless networks

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Learn more about the MFA here.

The MFA is open for broad, global participation. Interested in joining? Contact us today for a membership packet.
