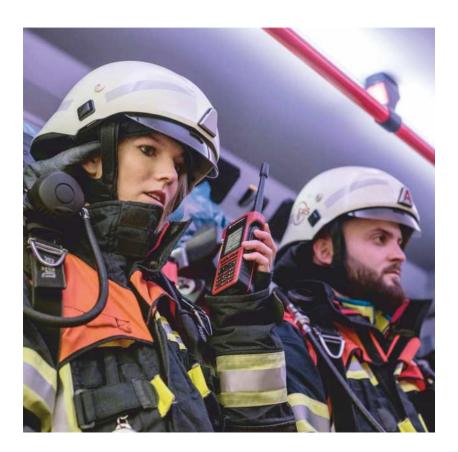


## PROFESSIONAL MOBILE RADIO: A CONCEPT FOR SECURE COMMUNICATIONS



Professional Mobile Radio (PMR) is not a technology. Professional Mobile Radio represents a concept for Secure Communications. This concept covers comprehensive measures necessary to make application-, mission- and business-critical communications secure enough to meet the requirements of even the most demanding customers. Professional Mobile Radio offers performance features especially tailored to user requirements and their specific communication relationships. In addition to a highly reliable and secure network, it covers appropriate terminal devices (designed as robust units or in the smartphone style), accessories adequate for the respective applications as well as system and transmission link redundancies. Professional Mobile Radio permits individual and reliable ap-



plications – ranging from a simple database inquiry to a complex operation control center and artificial intelligence applications – and provides secure interfaces between all solution elements. An important factor not to be forgotten is the necessary protection of all solutions and elements against natural forces, vandalism and sabotage, including cybercrime, as well as the necessity to take account of individual operational aspects.



The central argument for the use of Professional Mobile Radio is the outstanding security and reliability of the systems. As a concept for Secure Communications, Professional Mobile Radio guarantees a level of security that cannot be achieved with public mobile telephone systems. The reasons lie in the system design tailored to meet both functional and security requirements with an approach focused on the overall solution, as well as in the performance features designed to meet the specific requirements of public safety authorities, companies and corporations. **O** 



# **GREAT VARIETY OF USERS**



Professional Mobile Radio ensures smooth communication under all imaginable conditions. It is a must in all areas and places where communication is essential: at airports, in utility companies, supply and disposal enterprises, public passenger transport companies, municipal corporations and authorities like police, fire brigades and rescue services as well as other public safety authorities and organizations. However, also traditional companies – for example in the chemical, automotive and steel industry – are using secure Professional Mobile Radio systems to optimize both reliability and efficiency within the company. Especially in the context of the increasing digitalization, Secure Communications become more and more important to ensure public security and order and to maintain the smooth operation of critical infrastructures and the reliable functioning of business-critical processes in industrial companies. **O** 



#### MAXIMUM RELIABILITY

Professional Mobile Radio is characterized by special performance features which can be reproduced inadequately at best in mobile telephone systems, but can never be implemented with a comparable quality. These features include above all extremely fast communication setup, communication possibility in any type of groups, even in very large groups, call prioritization and guaranteed emergency call.

Professional Mobile Radio is protected against eavesdropping (tap-proof) and guarantees the confidentiality of voice and data communication. Its special performance features permit the highly efficient information exchange between mobile units, between mobile units and the operations center, as well as between the individual devices and systems (e.g. for system remote control and remote inquiry of statuses or databases). Since dependence on external infrastructures is completely avoided or largely minimized, Professional Mobile Radio guarantees failsafe performance and ensures that the radio capacity and radio coverage needed are really available – both in everyday operation and in case of disasters and emergency situations. Thus, the highest level of security imaginable for mobile communication is guaranteed. Professional Mobile Radio works reliably in all situations, even and especially in those when it counts. **O** 



### FLEXIBILITY FOR INDIVIDUAL SOLUTIONS



Professional Mobile Radio is not an off-the-peg product. The customer himself can decide which functions, degree of redundancy and how much capacity he requires in the individual places. He also decides as to how his system shall be protected against outside influences such as forces of nature, technical failures (e.g. of the power supply or transmission system) or sabotage (irrespective of whether by physical violence or from the cyber space). He manages the interfaces between his communication network and other technical facilities such as command & control centers, databases or communication servers and can thus protect them efficiently against external threats. Only with Professional Mobile Radio, the user has the functional sovereignty over the communication system indispensable for maintaining and controlling processes critical for performance, business operations and specific applications.

In addition, only the Professional Mobile Radio product scope includes terminal devices whose robustness and variety of application options (dust and wetness protection, explosion protection, accessories) meet exactly the individual needs of professional users. These devices can also be designed as state-of-the-art smartphones. •





#### INVESTMENT PROTECTION THROUGH STANDARDIZATION

The PMeV (Professioneller Mobilfunk e. V., German PMR Association) promotes standards for Secure Communications solutions. It offers a platform for working committees, for example to elaborate interface standards.

Standards generate competition on the market. Competition in turn improves the quality and performance features of products, leads to a variety of offerings and ensures fair market prices. This results in a wide choice of technically sophisticated solutions and high cost efficiency. However, standardization also guarantees the interoperability between networks, terminal devices as well as control and management systems from different manufacturers. Thus, users, operators and manufacturers can be sure to invest in a future-oriented technology with a long-term perspective. **O** 





### THE PMeV

The PMeV is a network of experts for mission- and security-critical communications solutions required for professional mobile applications. Its members include manufacturers, system providers, application houses, network operators, users, consultants as well as further technical specialists and experts.

The PMeV brings together suppliers and users to discuss both chances and risks of different solution approaches, jointly develop concepts and evaluate various technologies and technical solutions. It offers a platform for a neutral, manufacturer-independent and partnership-based dialog. The PMeV considers itself as a network with internal and external impact.

PMeV members are dedicated Secure Communications experts. For decades, they have been dealing with the requirements of users whose communication devices must be fully functional whenever this is essential, whenever a communication failure is no option because it would threaten high corporate and economic values or sometimes even human lives. **O** 



#### ACHIEVING MORE TOGETHER

Secure communications systems for security authorities, operators of critical infrastructures and industrial plants significantly contribute to the security and safety of our society. One of the central tasks of the PMeV lies in creating both the general public awareness and specific political and regulatory framework required.

The PMeV members are committed to shaping the future of Secure Communications and pursuing and achieving common goals. For this purpose, the PMeV offers a platform of numerous technical committees for the topic-oriented dealing with a variety of subjects. •



# FUTURE-ORIENTED UTILIZATION CONCEPTS

The PMeV pursues comprehensive approaches for using standardized Secure Communications solutions. The main focus of the PMeV members is always put on future-oriented utilization concepts in the sense of an overall solution based on different technologies. All aspects are taken into consideration, starting from the communications network via the terminal devices, command and control systems, applications, the security of connecting lines and company site up to the operational concept. This is the only way to meet the requirements of professional users today and in the future. **Q** 



#### PMRExpo

The PMRExpo is the leading European Exhibition for Secure Communications. It offers a platform for international networking and exchange of knowhow. This Exhibition is the marketplace for ideas and solutions regarding all aspects of Secure Communications.

With its central elements, the Trade Show, Secure Communications Summit and Energy Management Symposium, the PMRExpo is unique in Europe regarding its size and diversity. Complementary specialist forums permit the in-depth discussion of experts on different topics in smaller groups. In addition, in all PMRExpo Congress parts, high importance is attached to the direct exchange and interaction between the speakers and audience.

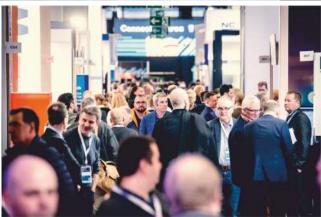
At the PMRExpo, visitors from all over the world meet both national and international exhibitors from all areas of Secure Communications. Besides solutions already well-proven, exhibitors there present their latest developments and innovations to the public every year.

The PMRExpo has taken place under the promotional sponsorship of the PMeV since 2001. O











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