



New business models for connected industry Partnership agreed between Bosch and Munich Re

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- ▶ First IoT collaboration between technology company and reinsurer
- ▶ Connectivity, financing, and risk management from a single source
- ▶ Plans for joint development of products together with manufacturing customers

Berlin and Stuttgart, Germany – In the future, the supplier of technology and services Bosch and the reinsurance company Munich Re will be collaborating to develop new ideas in the field of Industry 4.0. On February 22, representatives of the two companies signed a collaboration agreement at the Bosch ConnectedWorld IoT conference in Berlin. The aim of the alliance is to develop new solution packages for connected manufacturing. The two partners will be combining their respective strengths: Bosch in the fields of hardware, software, and services, and Munich Re in the areas of risk and capital management. Their integrated offer will allow manufacturing customers to put connectivity projects into practice along the entire value chain using innovative financial instruments and with a manageable level of risk.

Dispelling customer concerns about financial risks

Dr. Stefan Hartung, member of the Bosch board of management whose responsibilities include manufacturing coordination and Industry 4.0, said: “Too many companies are still apprehensive about entering into connected manufacturing because they’re worried about the financial risks. We’re addressing this problem. Bosch and Munich Re will be developing intelligent solutions that make it easier for customers to take up connected manufacturing.”

Torsten Jeworrek, member of the board of management of Munich Re, said: “We’re extremely delighted that we have found our first strategic partner in Bosch, one of the world’s leading tech companies, with whom to develop new business ideas for manufacturing companies. By combining technology, risk

management, and financial tools, we'll be able to provide added benefit to customers who want to utilize the opportunities of Industry 4.0."

Smoothing the transition to connected industry

The manufacturing industry is having to react more and more flexibly to market requirements that are changing ever more quickly. In order to optimize the quality, time, and cost aspects of their own production operations, many companies are considering digitally connecting their manufacturing systems. This requires either new machinery or IoT-compatible retrofit solutions that will allow them to link existing machines with each other and connect them to their company IT. Especially for SMEs, however, putting such projects into practice and financing them is often a great challenge. This is where Bosch and Munich Re come in: customers will not just receive in-depth advice on their connectivity projects, including the right software tools and services. Right from the start, they will also receive support with financing and in utilizing their manufacturing data.

Defining models to minimize risk

In initial pilot projects, the two partners are currently working with customers on specific solution packages. In workshops and on-site meetings, they are identifying precise requirements, and determining implementation steps and financing concepts. In concrete terms, it is about identifying what machine and manufacturing data is needed to carry out the in-depth analysis and, ultimately, to optimize manufacturing operations. On this basis, the partners will be able to more specifically pinpoint maintenance requirements and define new models for risk minimization. In addition, Bosch and Munich Re are making sensor-based loss-prevention measures available, as well as innovative financial instruments for risk transfer. A loss database and the two companies' expertise in data analysis contribute to this integrated risk-management approach. In this way, Bosch and Munich Re will be able to keep investment and operational risks to a minimum and make it easier to put Industry 4.0 solutions into practice.

Bosch ConnectedWorld on February 21/22, 2018, at the Berlin "Station"

The fully connected factory of the future is also the topic of Bosch ConnectedWorld in Berlin. For the fifth time, the company is organizing one of the world's largest IoT conferences for engineers, business representatives, and journalists. Additional information: <http://bit.ly/2EHclAg>

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The Bosch Group is a leading global supplier of technology and services. It employs roughly 400,500 associates worldwide (as of December 31, 2017). According to preliminary figures, the company generated sales of 78 billion euros in 2017. Its operations are divided into four business sectors: Mobility Solutions, Industrial Technology, Consumer Goods, and Energy and Building Technology. As a leading IoT company, Bosch offers innovative solutions for smart homes, smart cities, connected mobility, and connected manufacturing. It uses its expertise in sensor technology, software, and services, as well as its own IoT cloud, to offer its customers connected, cross-domain solutions from a single source. The Bosch Group's strategic objective is to deliver innovations for a connected life. Bosch improves quality of life worldwide with products and services that are innovative and spark enthusiasm. In short, Bosch creates technology that is "Invented for life." The Bosch Group comprises Robert Bosch GmbH and its roughly 440 subsidiary and regional companies in 60 countries. Including sales and service partners, Bosch's global manufacturing, engineering, and sales network covers nearly every country in the world. The basis for the company's future growth is its innovative strength. At 125 locations across the globe, Bosch employs 62,500 associates in research and development.

The company was set up in Stuttgart in 1886 by Robert Bosch (1861-1942) as "Workshop for Precision Mechanics and Electrical Engineering." The special ownership structure of Robert Bosch GmbH guarantees the entrepreneurial freedom of the Bosch Group, making it possible for the company to plan over the long term and to undertake significant upfront investments in the safeguarding of its future. Ninety-two percent of the share capital of Robert Bosch GmbH is held by Robert Bosch Stiftung GmbH, a charitable foundation. The majority of voting rights are held by Robert Bosch Industrietreuhand KG, an industrial trust. The entrepreneurial ownership functions are carried out by the trust. The remaining shares are held by the Bosch family and by Robert Bosch GmbH.

Additional information is available online at www.bosch.com, iot.bosch.com, www.bosch-press.com, twitter.com/BoschPresse.

Munich Re stands for exceptional solution-based expertise, consistent risk management, financial stability and client proximity. This is how Munich Re creates value for clients, shareholders and staff. In the financial year 2016, the Group – which combines primary insurance and reinsurance under one roof – achieved a profit of €2.6bn. It operates in all lines of insurance, with over 43,000 employees throughout the world. With premium income of around €28bn from reinsurance alone, it is one of the world's leading reinsurers. Especially when clients require solutions for complex risks, Munich Re is a much sought-after risk carrier. Its primary insurance operations are concentrated mainly in ERGO, one of the leading insurance groups in Germany and Europe. ERGO is represented in over 30 countries worldwide and offers a comprehensive range of insurances, provision products and services. In 2016, ERGO posted premium income of €16.0bn. Munich Re's global investments (excluding insurance-related investments) amounting to €219bn are managed by MEAG, which also makes its competence available to private and institutional investors outside the Group.