KG COMM Enhanced Push-to-Talk with Integrated Dispatch

Manufacturing Industry

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Snapshot of the manufacturing industry

Overall business Key communication **Key Facts** challenges challenges Line-sideuptimeand Reaching the right employee Contributed \$2.09 production yield trillion economic orgroupanytime Employee productivity Supports an estimate Mobile access to real-time 17.9 million jobs in the data Work order management US Application integration on Process management and US manufacturers are the thesamedevice quality control most productive in the world Asset maintenance and System interoperability management . US manufacturing equals the 9th largest economy Communication cost control Inventory management • in the world Operating profit

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Issues with existing mobile communications services in the manufacturing industry

- Two-wayLandMobileRadios(LMR)areunabletosupportmobilebroadbanddata applications.
- Two-wayLMRs also have geographic coverage constraints, complexity of talk group set-up/updates, inefficient system resources for 1:1 private calls, and high total cost of ownership.
- Existing 3G-based PTT-over-cellular services only work on older hand sets and have limited device choices, with no support for 4G LTE.*
- Employees who need to use a two-way radio for PTT and a smartphone for data must carry two separated evices, which can increase costs and inconvenience.

*LTE is atrademark of ETSI. 4G LTE is not available everywhere.

Fragmentation of existing voice/data communications in the manufacturing industry

| Device | Supported | Not Supported | |
|---|--|--|--|
| Wireline PBX Phone | Voice communication on the desktop | Mobile voice Instant voice Computing/data applications | |
| Legacy Paging Device | One-way text messaging | Voice communicationsComputing/data applications | |
| Traditional PTT Paging Devices (e.g., two-way radios) | Instant mobile voice communicationsLimited messaging | ComputingBroadband data | |
| PC, Laptop, or Tablet | Personal computing Data and line-of-business apps | Voice communicationText messaging | |
| Feature Phone with regular cellular service | Cellular voiceMessaging | Instant group voice communication Computing/data applications | |
| Smartphone with regular cellular services | Cellular voice Messaging and email Web browsing Access to line-of business applications | Instant mobile voice communication (especially group calls) | |

How KG COMM EPTT helps the manufacturing industry



Key capabilities of KG Comm EPTT

- PTT over latest cellular network and Wi-Fi*
- Interoperability with LMR **
- Broad device choices, including smartphones, featurephones, and desktop PC
- Application integration on the same device
- Centralized and on-the-fly contact and group management
- Sub-second call set-up
- Otheradvanced features, including real-time presence, talker priority (supervisory override) and talk group late entry/re-entry

*Wi-Fi requires compatible network configuration

**LMR interoperability requires equipment not available from KG COMM

How KG COMM EPTT helps the manufacturing industry, continued



Key potential benefits

- Converged communications on the same network
- A single device for all mobile voice and data communication needs
- Broadnetworkcoverageandsystemcapacity
- Enhanced communication efficiency
- Centralized and on-the-fly contact and group management
- Reduced communication costs through device
 and network consolidation

KG COMM EPTT for major roles of manufacturing

| Production | Shipping & | Plant managers/ | Maintenance/ | Executives |
|---|---|--|--|---|
| workers | Receiving | Foreman | Service | |
| PTT over Wi-Fi Feature phone Smartphone Group calling Single converged | PTT over Wi-Fi PTT over 3G/4G | PTT over Wi-Fi PTT over 3G/4G | PTT over Wi-Fi PTT over 3G/4G | PTT over 3G/4G cellular Smartphone Group calling Single converged device |
| device Productivity app | cellular Feature phone Ruggedized | cellular Feature phone Ruggedized phone Group calling Single converged | cellular Feature phone Ruggedized phone Group calling Single converged | |
| integration Remote Speaker | phone Group calling Single converged | device Productivity app | device Productivity app | |
| Microphone | device Productivity app | integration Remote Speaker | integration Remote Speaker | |
| (RSM) | integration | Microphone (RSM) | Microphone (RSM) | |