



COLD CHAIN
TRACKING
TELEMATICS



SUMMARY

- The cold chain is expanding since the consumption of cold produce is also growing. Businesses are looking for improved traceability options, including food, pharmaceutical, and cosmetics companies.
- A good example of the scope of the problem is a global food waste report by the United Nations where it states that over 20% of fresh produce gets lost in supply chain between harvest and retail.
- The result? Huge economic, social, and environmental losses. As such there is a growing interest and efforts in developing sophisticated cold chain traceability technologies.

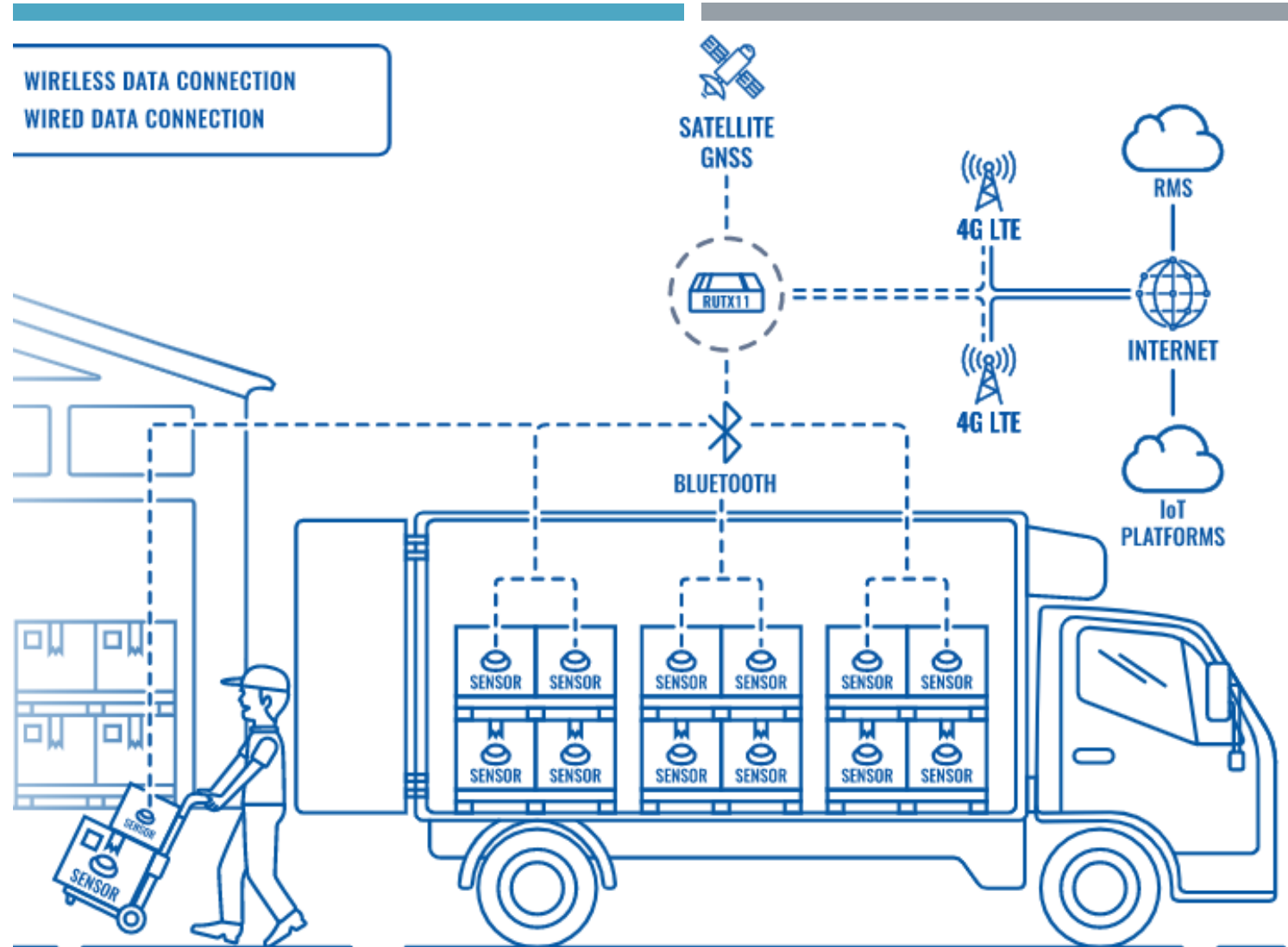
CHALLENGE

- Should it be food, chemical products, or the new hot topic -vaccine, when the temperature requirements are not met even for a short period, the goods are no longer safe and need to be discarded.
- As a result, in financial losses, the businesses are interested in possibilities to track the supply chain for accountability and prevention reasons. Besides, with products like vaccines, there is a lot more planning involved due to required follow-up doses that are also time-bound.
- Such goods are also an attractive target for theft and fraud.
- **Tracking** the location and movement of them is therefore essential to avoid losing or misplacing the shipment. All these processes require effective tools and systems in place.

SOLUTION

. Using the sensor data allows to set up notifications whenever something out of the ordinary occurs.

For example, if the temperature falls behind or gets close to a certain measure the system warns the user and the situation can be rectified to avoid bigger losses



BENEFITS

- Reliable Connectivity – Ensured by dual SIM cellular router with auto-failover and SIM switch capabilities
- Simple Ecosystem – one router can connect up to 200 Bluetooth sensors and the pairing process takes seconds using a smartphone device like.
- Security – since some cold chain produces, like pharmaceuticals, are of interest to theft, the data is secured in a professional level VPNs and industrial protocols are used.
- Exact traceability – GNSS service availability on the router allows to track the exact location (or supply chain link) where a certain event occurred.

