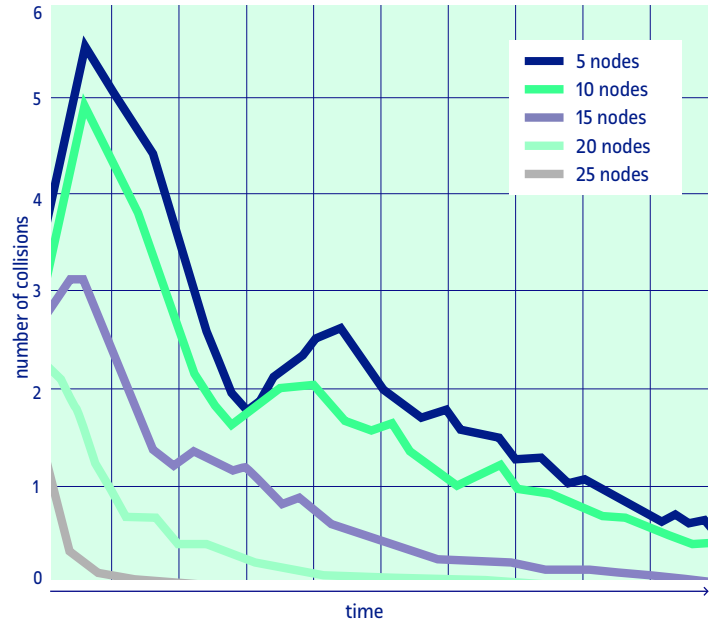


# Is your IoT network efficient enough?

Our Hybrid Self-Scheduled protocol (HSS) allows your IoT network to perform up to 99% with energy savings, even with a dynamic configuration and bursty data traffic

HSS is a novel low-power hybrid MAC protocol that provides the following advantages:

- **Increases network efficiency up to 99% due to elimination of data packet collisions by distributing nodes in a double queueing system**
- **Network efficiency does not depend on the number of nodes in the network**
- **Saves on infrastructure in dynamic node networks as no planning mechanism is needed**
- **Reduces energy consumption compared to current random network MAC protocols**
- **Counteracts the effects of multi-path propagation and neighbouring network's interferences with frequency hopping mechanism**



Evolution of the length of the Collision Request Queue (CRQ) depending on the number of nodes in the network. After a few number of frames, the length of the CRQ converges to zero

# The perfect alternative for data collection scenarios where the traffic is bursty and the number of nodes is dynamic

## Available for

Any wireless network, especially those with a dynamic number of nodes that generate bursty traffic



### Smart cities

- Measurement and control of public services (water, electricity, gas, etc.)
- Public safety
- Environment
- Urban transport



### Industry

- Process and operations
- Supply chain and equipment monitoring



### E-health

- Teleassistance
- Remote patient monitoring



### Logistics and transport

- Fleet management
- Smart traffic management



### Agriculture

- Pest management
- Intelligent irrigation



### Inventors

Xavier Vilajosana and Pere Tuset, researchers from the Wireless Networks (WINE) group at the Internet Interdisciplinary Institute (IN3)



### Patents

PCT/EP2013/061296, Method and apparatus for sending and receiving data in a machine to machine wireless network



### Video

<http://tinyurl.com/UOChss>



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