



IoT is happening...

We need to do this right!

GSMA's IoT Connection Efficiency
Guidelines will give you a BIG head start!



212 billion*

We can't stop talking about these numbers, **but**...

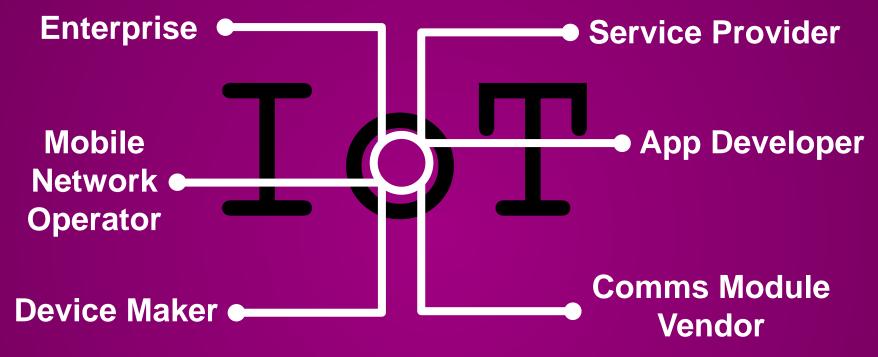
How many developers do we need to connect X billion devices?

50 billion

2020

loT is happening...





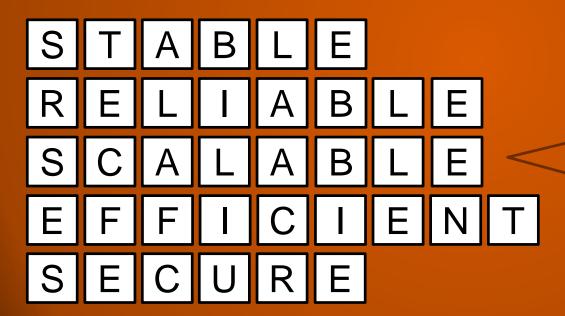
Each player has an interval value chain!

loT ecosystem



The Internet of...

_____Things

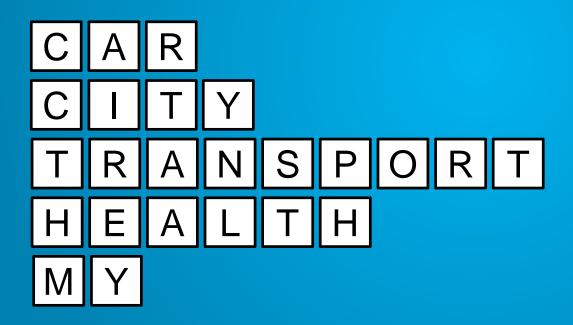


Necessary for a good connected customer experience and prerequisites for...



The Internet of...

Things





GSMA IoT Device Connection Efficiency Guidelines

Avoiding Chaos – Enabling developers to build efficient IoT devices and applications



Enterprise •

Mobile
Network

Operator

- Enterprises and MNOs = BFF
- MNOs have broad experience
- Our networks support:
 - Explosive growth of IoT
 - Explosive growth of developers learning on live networks
 - Managing operational incidents and challenges with devices in the field

operator experience



The mobile phone network is a shared resource that has drastically altered societies around the world for better.

With any shared resource, efficient usage is needed to ensure the benefit for all.

"Global Operators Agree New Guidelines to Define How Internet of Things (IoT) Devices and Applications Should Connect to a Mobile Network, Ensuring Optimal Performance and Aiding Growth of IoT"

[GSMA "IoT Device Connection Efficiency Guidelines" released on Oct 13, 2014]



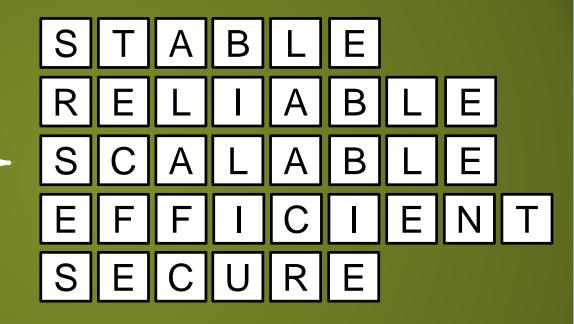




Billions of Connected Devices

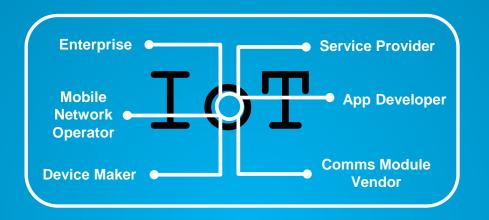
Complex Ecosystem

Huge Ramp-up in IoT Developers



the challenge





Guidelines for each role in the IoT ecosystem setting out best practices to ensure a great connected experience for your end customer!

IoT connection efficiency guidelines



Communication Module Guidelines:

Network Friendly Mode (NFM)

Radio Policy Manager (RPM)

To make it easier, the guidelines set out communication module functionality to protect the network.

Choose a communications module with NFM or RPM!





U-BLOX AND TELENOR CONNEXION TEAM-UP FOR NETWORK FRIENDLY M2M MODEMS

PRESS RELEASE
• Oct 20, 2014 15:45 GMT





TELIT, ALLIANZ TELEMATICS AND TELENOR CONNEXION JOIN FORCES TO OPTIMIZE IOT PERFORMANCE

PRESS RELEASE • Jan 15, 2015 08:00 GMT

Intelligent 2G/3G modules from u-blox optimize performance and IoT applications

Telit and Telenor Connexion collaborate with Allianz Telematics to optimise the mobile networks' usage according to the guidelines of the GSM Association (GSMA).

The Internet of Things (IoT) is truly coming of age with more than 50 billion devices expected to be connected by 2020. One of the challenges facing the Internet of Things is the possibility that a vast number of connected devices could overwhelm the data-carrying capacity of mobile networks.

To ensure that mobile networks can efficiently accommodate the increased number of connected devices and services resulting from the rapid growth of IoT, GSMA has released the "IoT Device Connection Efficiency Guidelines" detailing how to make IoT devices data-efficient.



Thank You!

Stephen Bryant CTO, Telenor Connexion stephen.bryant@telenor.com

