

## DOCKETED

<b>Docket Number:</b>	16-TRAN-01
<b>Project Title:</b>	SB 350 Transportation Electrification (Publicly Owned Utilities)
<b>TN #:</b>	214652
<b>Document Title:</b>	Presentation - BMW I Charge Forward - Smart Charging and the Sustainability Vision
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<b>Organization:</b>	BMW
<b>Submitter Role:</b>	Public
<b>Submission Date:</b>	12/7/2016 8:31:25 AM
<b>Docketed Date:</b>	12/7/2016



Adam Langton, EG-8-US , August 2016

# BMW | CHARGE FORWARD

**SMART CHARGING AND THE SUSTAINABILITY VISION**

# BMW Charge Forward

## SMART CHARGING FOR GRID BALANCING AND RENEWABLE INTEGRATION

Utility sends automated grid conditions signal to BMW software backend...

...BMW software backend sends charging start/stop messages to vehicle via telematics and informs driver...



Utility



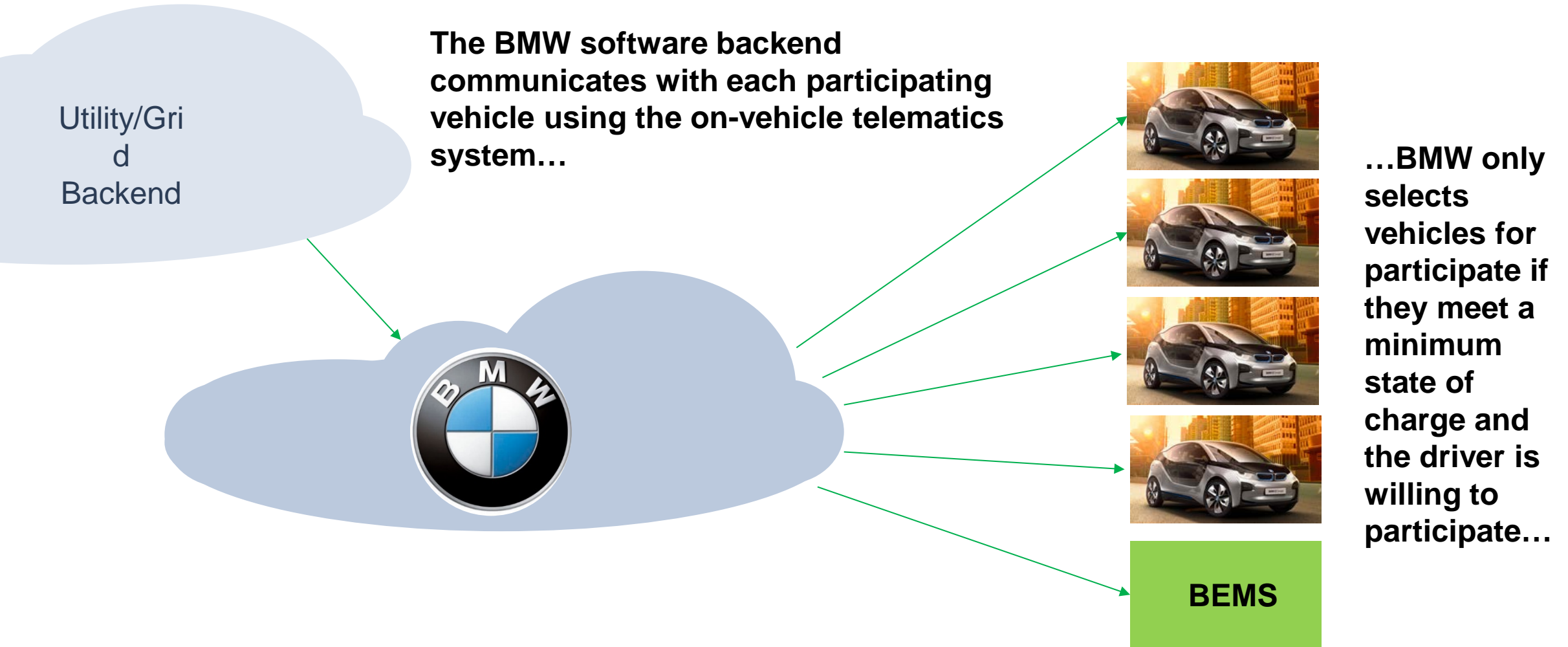
BMW Server



i-Brand Customers

...Vehicles Provide Balancing and Renewable Integration Services to the Utility

# THE BMW CHARGEFORWARD PROJECT TECHNICAL APPROACH



# BMW i CHARGEFORWARD.

THE CUSTOMER ALWAYS HAS THE RIGHT OF WAY.

## BMW won't constrain drivers' mobility needs:

1. If the customer sets a departure time, it will always be obeyed
2. BMW developed an app that allows the customer to opt out:
  - Pro-active opt-out: *'Today I don't want to participate'*
  - Re-active opt-out: Push notification to inform customers if vehicle is paused from charging + option to react

