



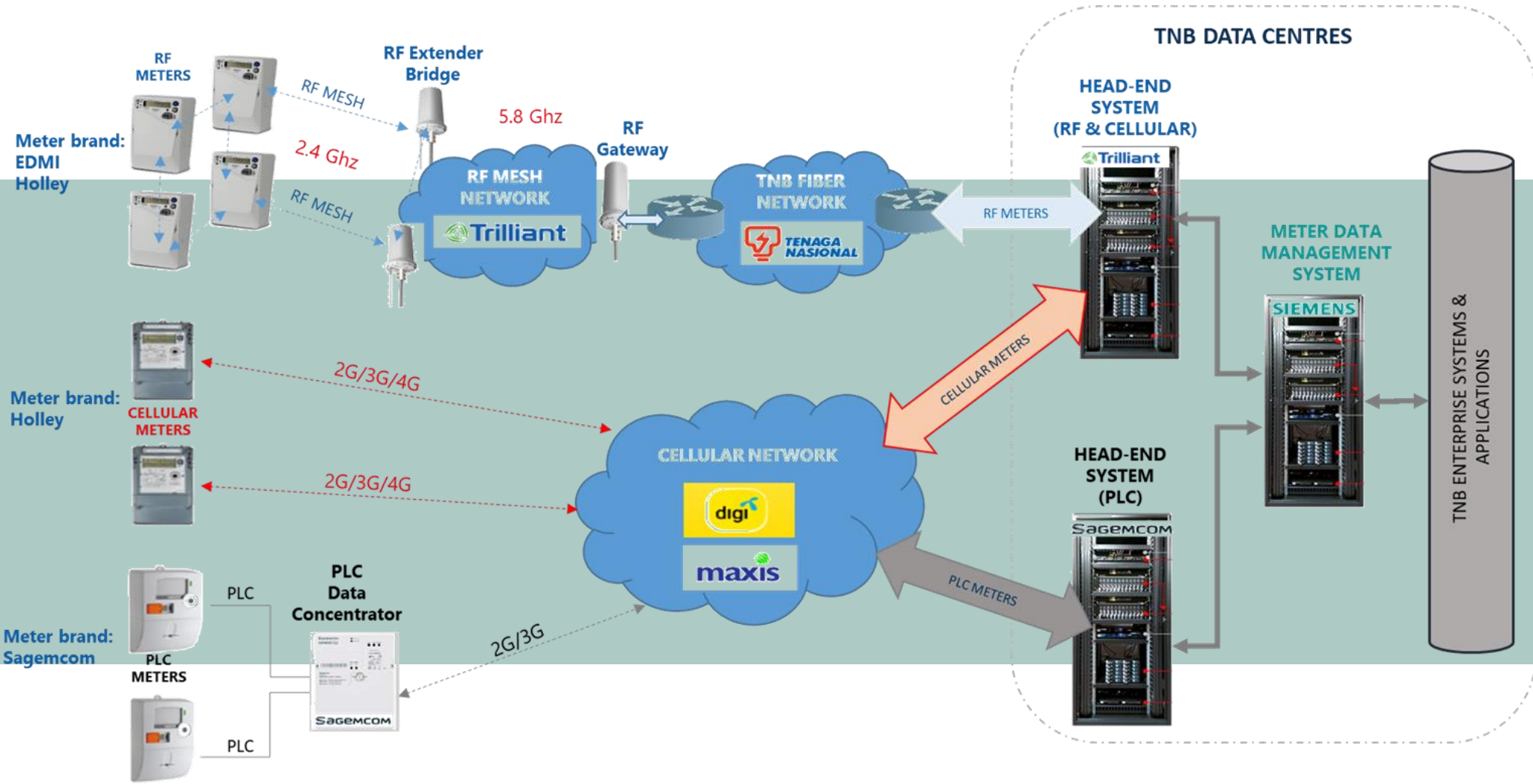
ILSAS Conference & Learning Development
ICLAD
2nd October 2019

Smart Meter Deployment In Melaka Site Deployment Challenges

Wan Jazmi Bin Wan Jaafar
Jurutera Utama (Project Deployment)
Advanced Metering Infrastructure (AMI)
Distribution Network, TNB



Advanced Metering Infrastructure (AMI) System Architecture



Smart Meter Deployment In Melaka – Plan & Expectations

Complete all installations

340k

By Dec 2019

All meters connected (communicated)

All meters start reporting to AMI backend system daily

Auto billing

Load profile pattern

Remote Connect/Disconnect

Tamper detection

Outage notification

Prepayment

Time of use tariff pricing option

Demand response

2 Notices

Letter and notice prior to installation visit

1 Engagement

Meeting stakeholders

6 Replacement of old meter with smart meter

- Disconnect supply
- Meter replacement
- Restore supply
- Accuracy test of smart meter
- Data recording

3 Installation Visit

- Installer identification
- Uniform
- Enquiries Contact No.

4 Customer not at home

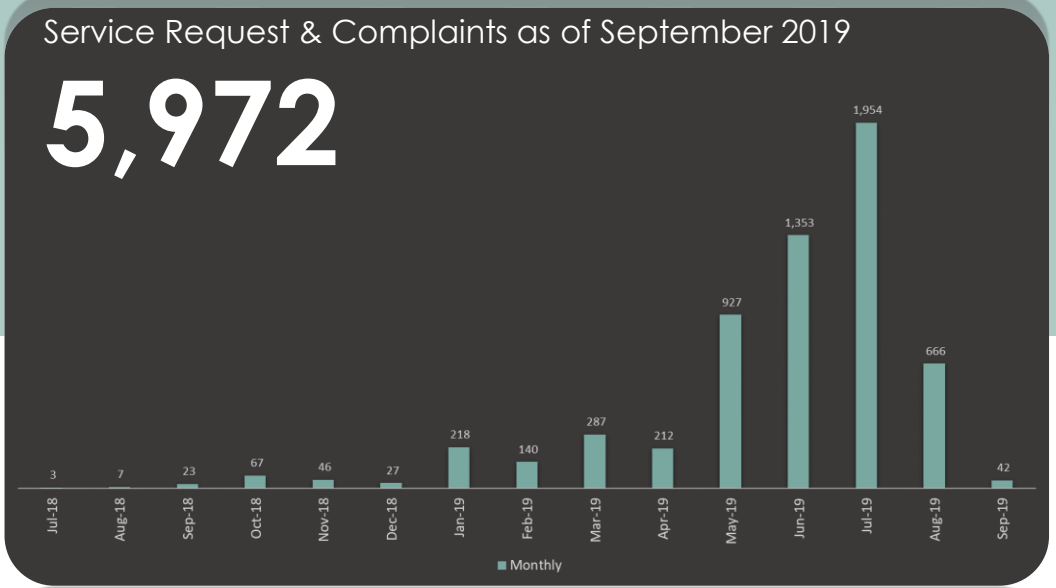
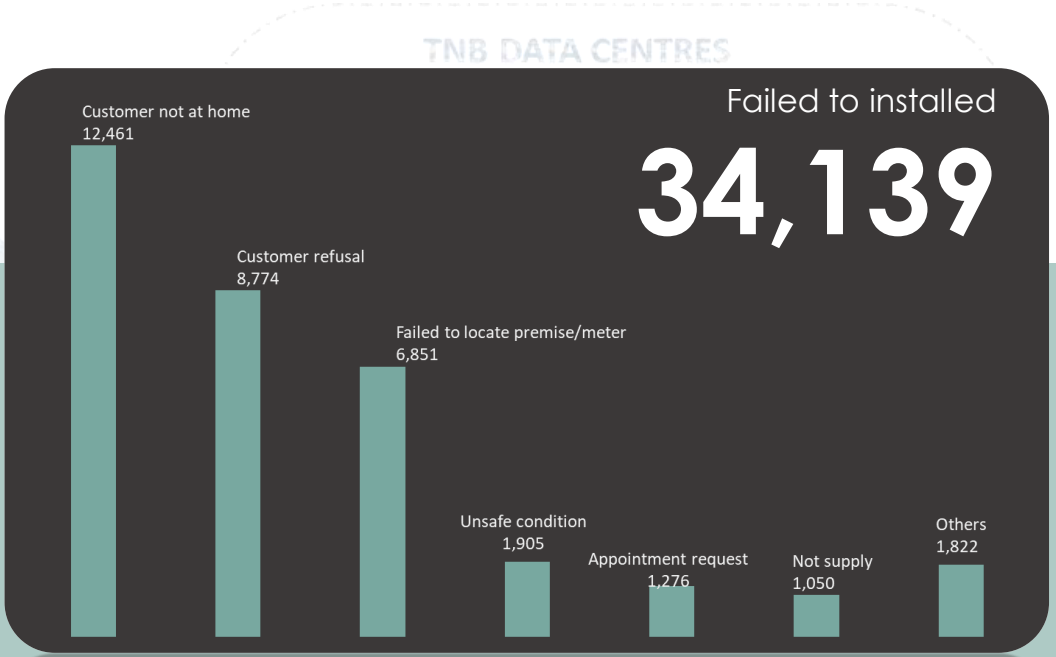
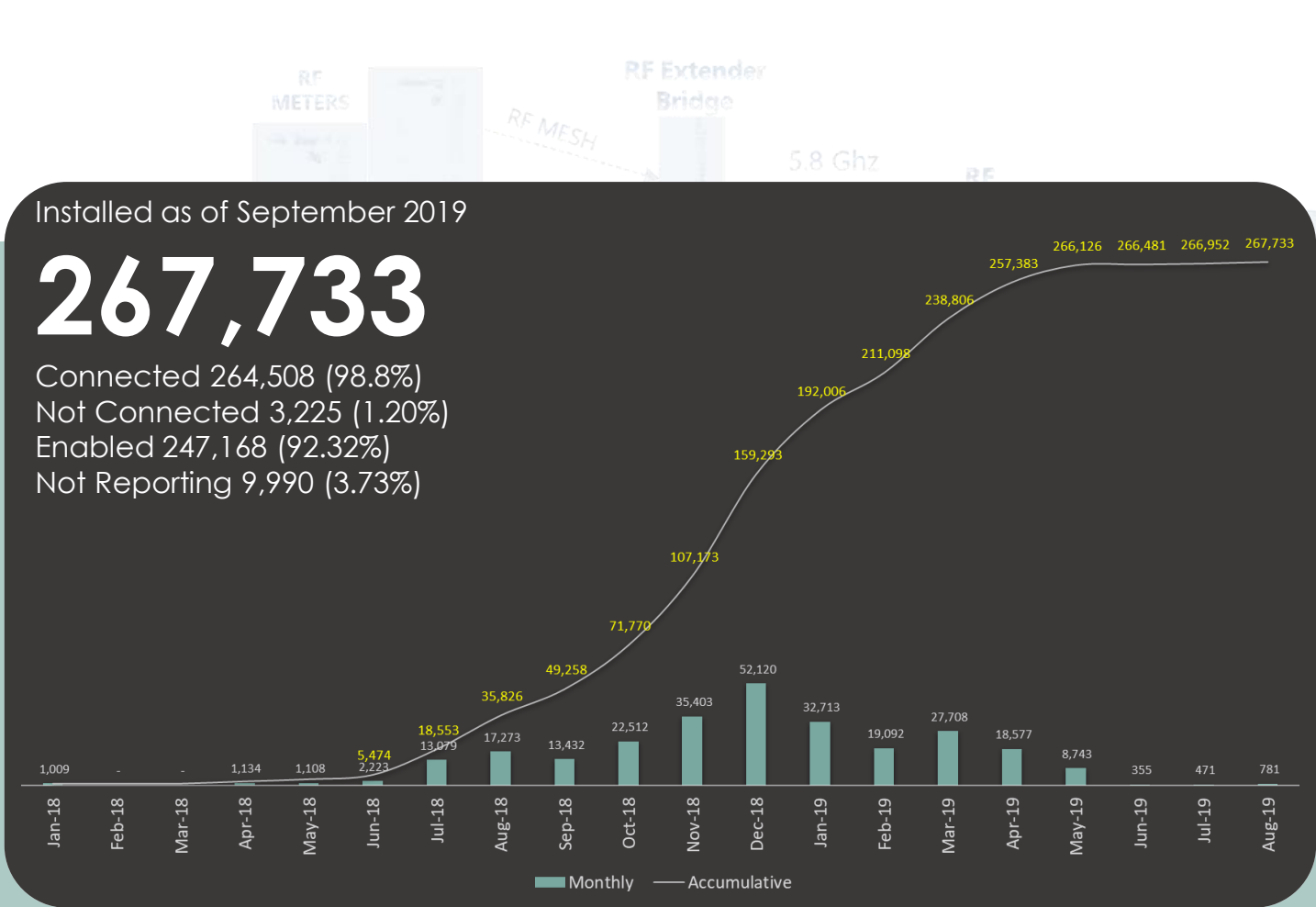
- Door hanger
- Appointment
- TNB shall contact customer

5 Installation checking

- Physical inspection
- Meter board inspection
- Accuracy test of old and new meter
- Observation, reading & data recording

www.tnb.com.my/smartmeters

Smart Meter Deployment In Melaka – Status September 2019




Smart Meter Deployment In Melaka – The Challenges

Installer



11 Main contractors
200 installation teams
8~10 installed/day

Communication Technology



Radio Frequency (70%)
9 clusters
Power Line Carrier (25%)
850 DCUs
Cellular (5%)
Filler

Meter



Holley (RF & Cellular)
EDMI (RF)
Sagemcom (PLC)

Standard Operating Procedure



Letter 30 days before installation
Presence of customer

Equipment



IPAD
(Service Order)
Celcom

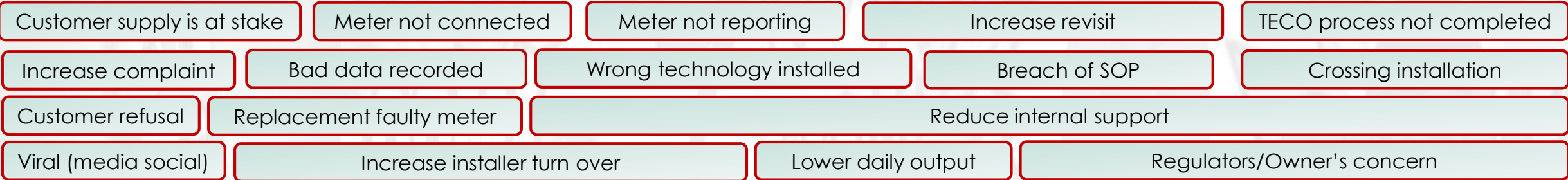
- Installation quality
- Attitude
- Competency
- Commitment
- Motivation

- Saturation
- Multiple communication in common area
- Manual process
- Filler is to be the last

- Technical issues
- Delivery

- Letters do not reach customers
- Customer not at home
- Customer makes appointment outside area installation windows

- Bad signal quality
- Enhancement needed



Smart Meter Deployment In Melaka/Klang Valley – Opportunity to improve

Installer

Reward & stricter
penalty in the new
contract

Review SOP

Increase
collaboration with
ILSAS on installer
competency
monitoring

More strict in
selection process of
installer

**Communication
Technology**

Review or improve
cluster planning

Improve installation
approach

Meter

Increase meter
suppliers

Increase lot
acceptance
capability
(more lab
equipment)

Monitor meter
delivery

**Standard Operating
Procedure**

Review SOP

Greater and
effective customer
engagement

Equipment

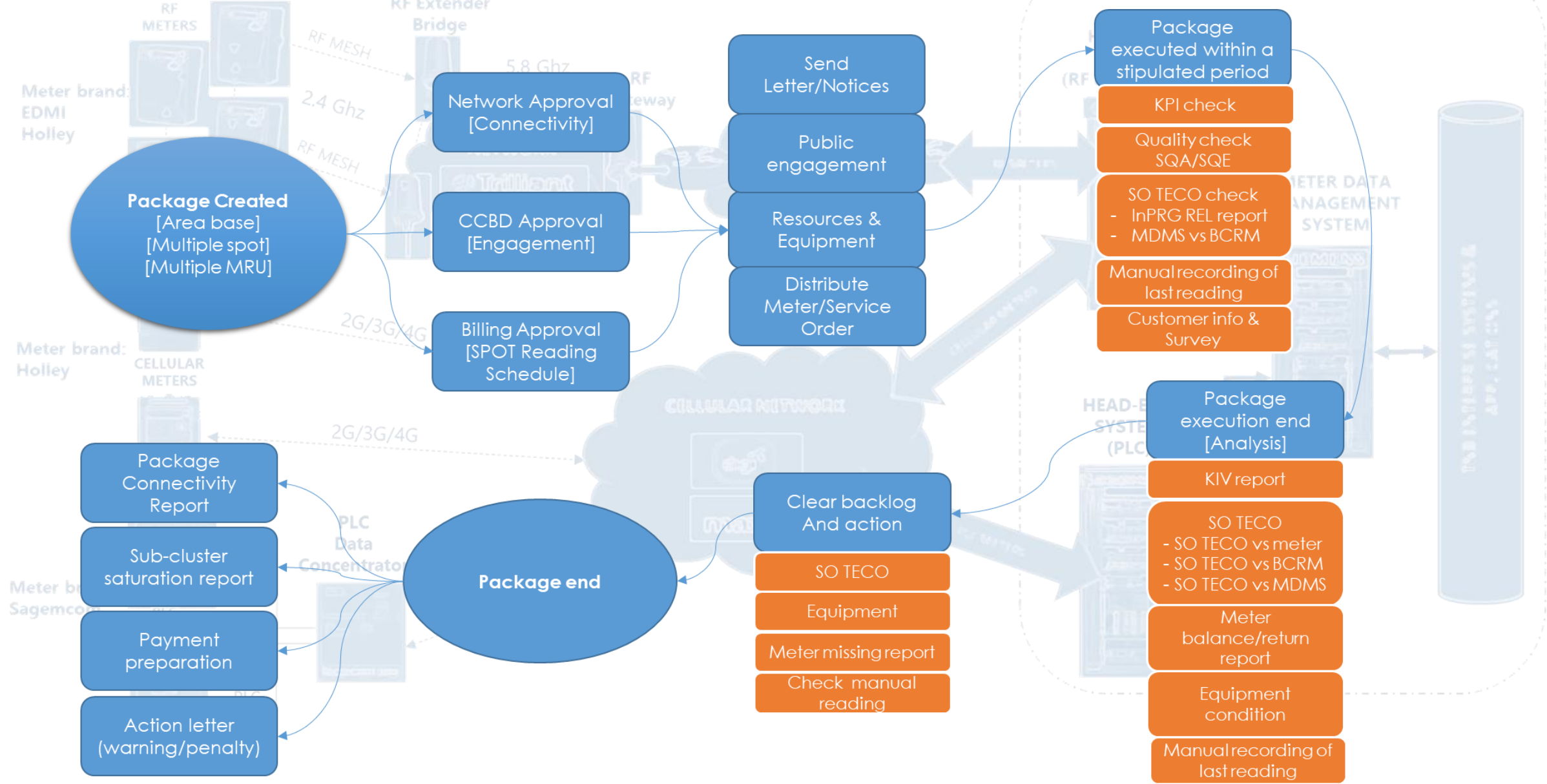
Opts to other Telcos

Multi roaming
service

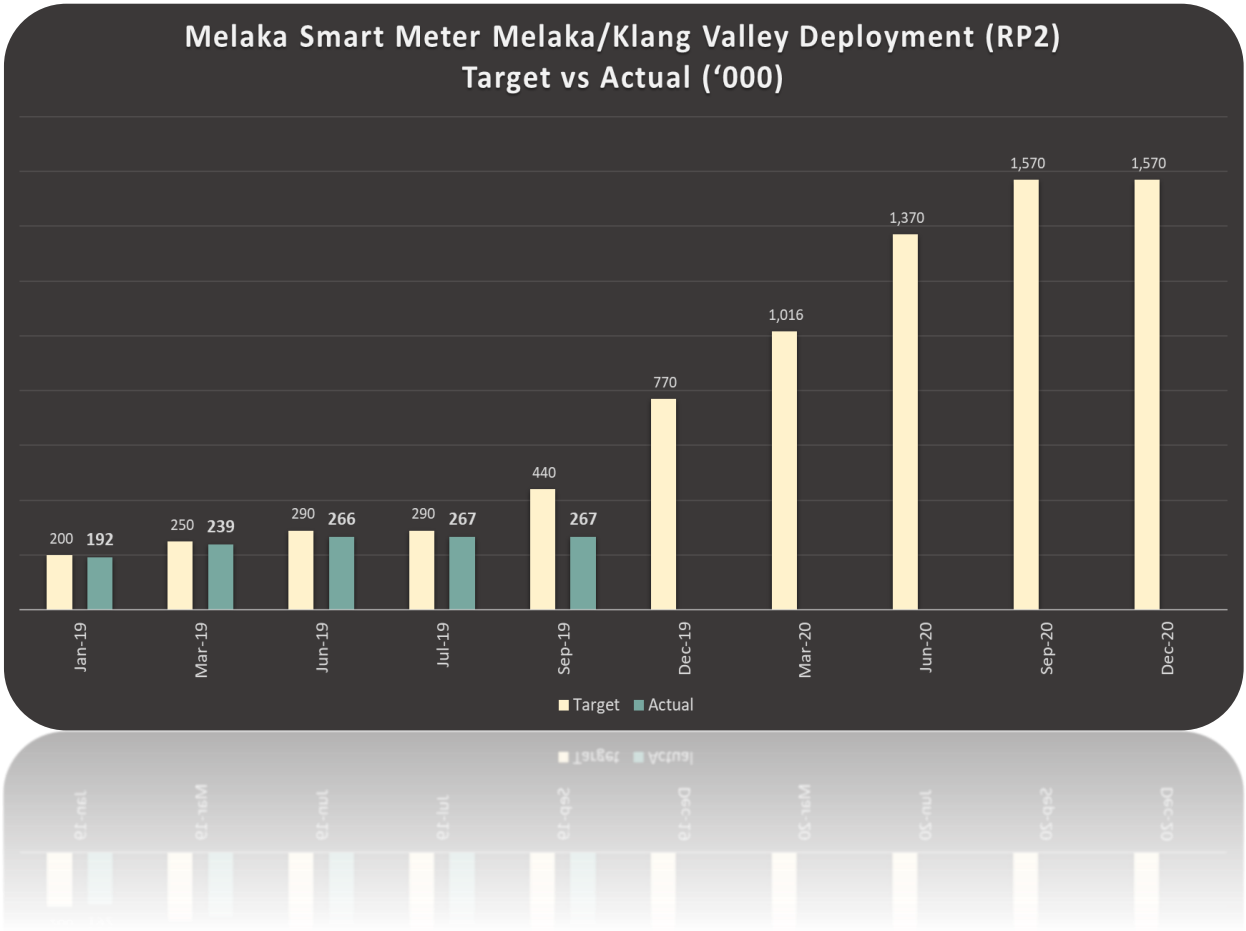
3MS enhancement

Review meter
packaging

Packaging Customer For Installation Deployment



Smart Meter Deployment In Klang Valley– Plan & Expectations



Complete all installations
1.2mil
By Dec 2020

Peak installation
120k~150k
per month

Installation team
~1,000

Meter vendor
8
To ensure supply security

Communication technology
**Radio frequency
& cellular**
Cellular as a filler technology

Prior to engagement
**Demographic
& profile study**

RF smaller cluster
5k
Packet as Technical Proposal
Installation within 1 week

Estimated meter connected
2 weeks
Enablement before next billing



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Thank You

