

# UPDATING THE REGULATORY FRAMEWORKS FOR EMBEDDED NETWORKS

STAKEHOLDER WORKSHOP

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RYDGES HOTEL, SYDNEY AND WEBCAST  
23 OCTOBER 2018

AEMC

# Agenda

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1. Updating the regulatory frameworks for embedded networks - overview
  2. Recap of the review of regulatory frameworks for embedded networks
  3. Summary of recommended framework and participants
  4. Network billing and payment – issues for discussion
  5. Implementation – issues for discussion
  6. *Discussion*
  7. *Lunch break*
  8. *Breakout roundtables*
  9. Recap and next steps
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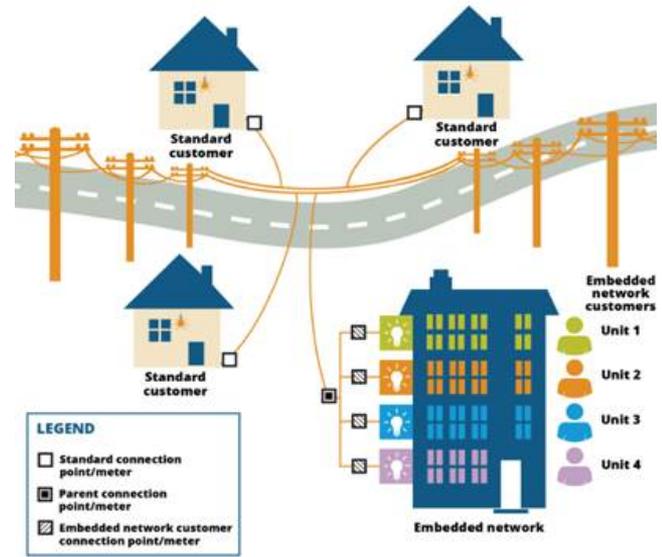
# UPDATING THE REGULATORY FRAMEWORKS FOR EMBEDDED NETWORKS - OVERVIEW

## UPDATING THE REGULATORY FRAMEWORKS FOR EMBEDDED NETWORKS

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## Overview

- The current review follows the Review of regulatory frameworks for embedded networks completed in December 2017
- Review of the regulatory framework for embedded networks was prompted by the significant uptake of embedded networks in recent years, and concerns in relation to poor consumer experiences
- The Commission found in the 2017 review that the current regulatory arrangements that applied to embedded networks were no longer fit for purpose



## Updating the regulatory frameworks for embedded networks

## Objectives

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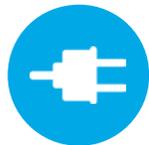
The purpose of the review is to advise on the detailed amendments to the regulatory framework that are required to implement the recommendations made by the Commission in the *Review of regulatory arrangements for embedded networks*.

The output of the review will be a report to the COAG Energy Council that includes:

- rules drafting for recommended changes to the NER and NERR
- drafting instructions for recommended changes to the NEL, NERL and National Energy Retail Regulations (if required)
- recommendations for any required changes to other regulatory instruments
- advice on any recommended actions for regulators, for example, revisions to the AER's exemption guidelines for embedded network operators
- information on gaps, or areas in which changes may be required, in jurisdictional regulatory frameworks that are identified in the course of undertaking the review
- advice on implementation, including the timing and sequencing of required changes

## Approach

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The focus of our work since August 2018 has been to develop the regulatory framework for new embedded networks recommended in the 2017 review



We have begun to draft legal text, and will consult on this through a draft report due before the end of the year



We will subsequently consider transitional arrangements for legacy embedded networks



The purpose of today's workshop is twofold:

- to remind stakeholders of the outcomes of the 2017 review and to provide information on our work program in the lead-up to the draft report
- to seek stakeholder feedback on some outstanding policy issues where further detail is required for implementation

# RECAP OF THE REVIEW OF REGULATORY FRAMEWORKS FOR EMBEDDED NETWORKS

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## Summary of the 2017 review

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- The Commission completed the Review of regulatory arrangements for embedded networks in November 2017, at the request of the COAG Energy Council
- The purpose of the review was to identify and assess any issues for embedded network customers under the NERL and NERR and identify appropriate solutions
- The AEMC was also requested to consider broader issues, and any consequential changes, in the NEL, NER, NGL and NGR
- The review followed previous consideration by the AEMC in the Power of Choice review and the making of the Embedded Networks Rule in December 2015

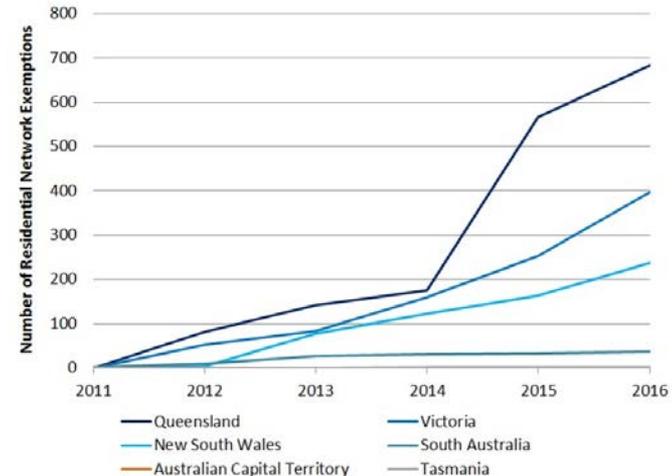
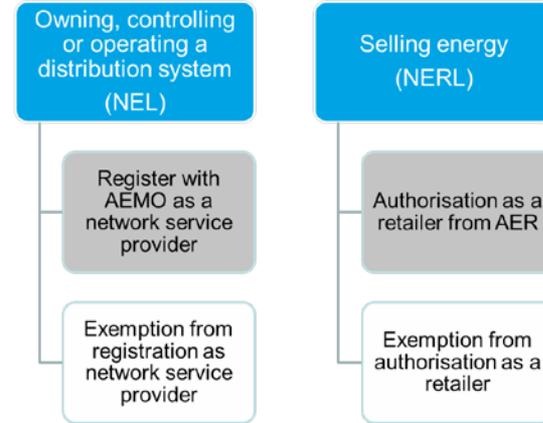


## Review into the regulatory frameworks for embedded networks

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## Background to the review

- There is currently a “two-tier” regulatory framework, whereby embedded networks and on-sellers are typically exempted from having to register as a network service provider and be authorised to be a retailer
- This framework was designed to reduce regulatory burden on embedded network owners
- However, the number and scope of embedded networks has grown significantly in recent years
- We estimate there are now over 200,000 embedded network customers



## Key findings of the review

- The exemptions framework is no longer fit for purpose in face of growth in number and scope of embedded networks
- Embedded networks customers receive a lesser level of consumer protections
- While some embedded network customers are benefiting from lower prices, many are paying up to standing offer levels
- The focus of the exemptions framework should be the consumer: by default, an embedded network customer should be able to expect similar access to competition and consumer protections as a standard customer

### Access to competition

- Discoverability of customers
- High transaction costs for retailers
- Potential double billing
- Access to metering

### Consumer protection

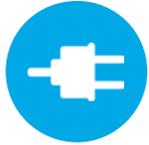
- Differences in obligations
- Inconsistent access to dispute resolution
- Price, information, safety and reliability concerns

### Compliance and enforcement issues

- Growth and diverse capability in ENs
- Complaints driven enforcement
- No reporting and limited monitoring
- Penalty regime not fit for purpose

## The new framework recommended by the review

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Elevate new embedded networks into the national framework by:

- requiring registration of embedded network service providers
- requiring on-sellers to hold a form of retailer authorisation
- extending Metering Coordinator, Metering Provider and Metering Data Provider roles



Narrow the network service provider and selling exemption frameworks by:

- restricting exemptions to circumstances where the costs of regulation would be high compared to the benefits to consumers and the need for regulatory oversight is low
- introducing more prescriptive criteria for the granting of exemptions



Improve access to retail market competition for embedded network customers through new requirements for most legacy, and all new, embedded network customers to be visible in MSATS and have standard network charging arrangements



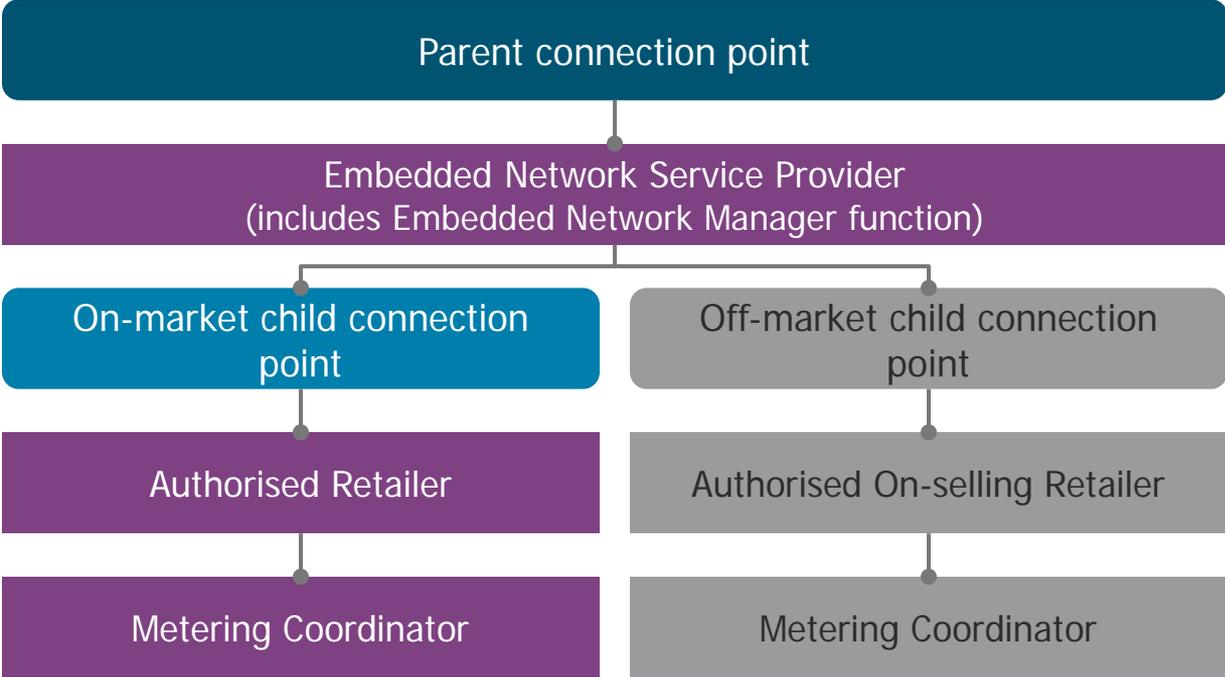
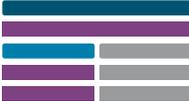
Enhance consumer protections in legacy and new embedded networks by addressing regulatory gaps for retail customers in embedded networks and through improved information provision, and improve monitoring and enforcement

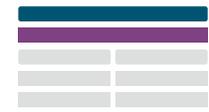
# SUMMARY OF RECOMMENDED FRAMEWORK AND PARTICIPANTS

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# Recommended framework for **registered** embedded networks





## Role

- Owns, controls or operates an embedded network

## Responsibilities

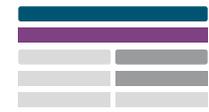
- Performs many LNSP functions within embedded network
- These include Embedded Network Manager functions within an embedded network

## Relations

- Interacts with all participants in an embedded network
- Will have a deemed connection contract with customers
- May also be the authorised on-selling retailer

## Issues for discussion

- Connections framework
- Reliability requirements
- Network billing
- Default arrangements



## Role

- Authorised retailer on-selling energy purchased at a parent connection point to off-market customers in an embedded network

## Responsibilities

- On-sells energy to off-market customers
- Appoints Metering Coordinator
- Obligated to make an offer to all off-market customers in the embedded network that it operates in

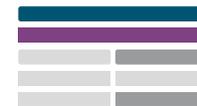
## Relations

- Metering Coordinator
- Embedded Network Service Provider/Exempt Embedded Network Service Provider
- Retailer at the Parent Connection Point

## Issues for discussion

- Designated retailer arrangements
- Retailer of Last Resort arrangements
- Which NERR retailer obligations should apply

# Metering Coordinator



## Role

- Registers metering installations and NMIs for off-market child connection points

## Responsibilities

- Appoints a Metering Provider and a Metering Data Provider

## Relations

- On-selling Retailer
- Metering Provider
- Metering Data Provider

## Issues for discussion

- Appointment of Metering Coordinator for new connections
- Obligations for off-market child connection points

# NETWORK BILLING AND PAYMENT – ISSUES FOR DISCUSSION

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## Purpose of today's presentation and discussion on network charging and billing

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- The 2017 review recommended that network billing arrangements for embedded networks should be standardised and that the Embedded Network Service Provider (ENSP) would issue a bill to the on-market retailer for network charges.
- Designing network charging and billing framework which is clear, simple and efficient will be important to facilitating retail market competition.
- We are seeking stakeholder feedback on potential elements of a network billing and payment framework for on-market embedded networks and other inter-related issues.
- The package of law and rule changes we are currently preparing will provide a detailed framework for stakeholder consultation in late 2018.

## First, some background - network billing in the NEM

- DNSPs generally bill retailers for a customer's network charges rather than billing the customer directly.
- The network charges that a DNSP levies to a retailer for a customer include several components: TUOS, DUOS and customer specific charges
- A small customer's bill for the supply of electricity to their connection point generally does not separately list retail and network charges.
- Chapter 6B of the NER sets out requirements for the billing and payment of network charges.
- No detailed procedures apply to network billing and payment. Retailers and DNSPs generally agree to the method and communication of these bills.

## Current network charging and billing arrangements in embedded networks

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- An exempt on-seller generally provides a single bill to embedded customers bundling energy and external network charges
- Where an embedded network customer goes 'on-market', an exempt network operator is permitted to recover the external network charges either directly from the customer or from the customer's market retailer
- An embedded network operator may charge a pro-rata charge no greater than the charge the distributor would have made to the customer had the distributor serviced the customer directly
- Embedded network operators and large customers may mutually agree to additional charges or value added services under a commercial agreement
- There are no analogous requirements to Ch 6B of the NER in relation to billing and payment obligations

# Uncertainty for both retailers and embedded networks



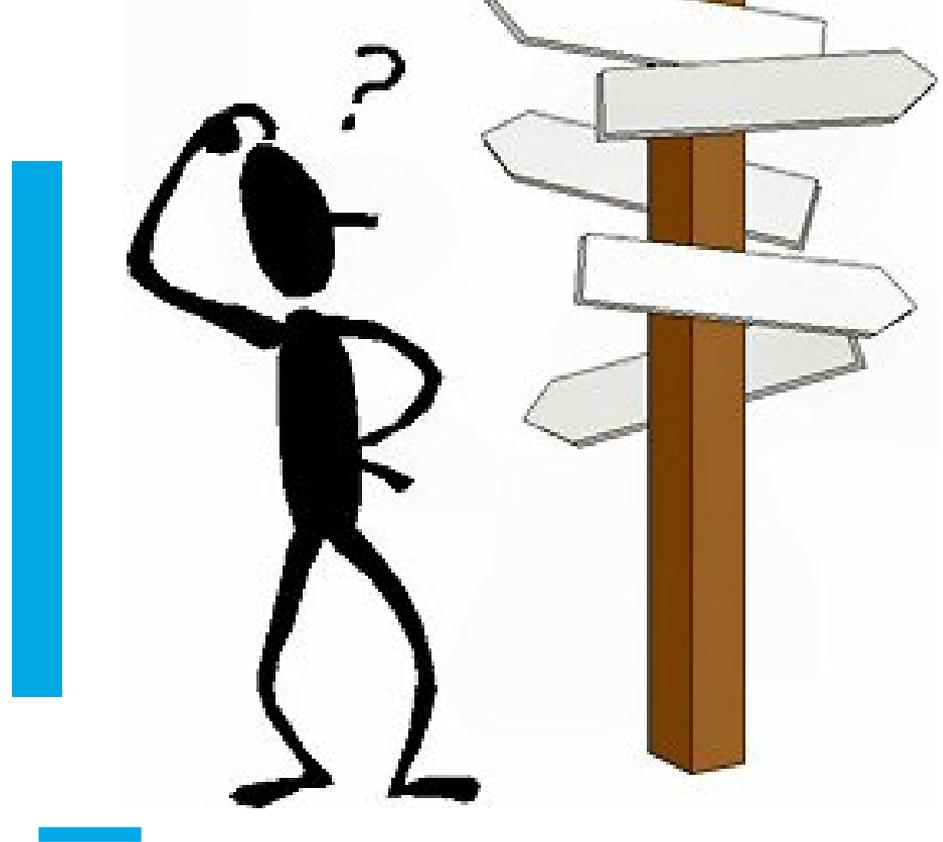
- Unclear whether the retailer or embedded network will charge the on-market customer for network charges



- Uncertainty over the network charging methodology



- No standardised network billing arrangements which set out data, billing and payment requirements



## Why is network billing important to retailers and retail competition in embedded networks?

“Without certainty over operations sections of the regulatory framework, such as published network tariffs, Use of System charges, data requirements and billing information, the process of providing embedded network customers with retail services could be **very difficult and costly**” (AGL, submission on the consultation paper, p. 5)

## Why is network billing important to embedded networks

“Currently, there is no contract between the customer’s retailer and the ENSP...Absent a standing agreement with every retailer, who may from time to time choose to supply customers within an embedded network, an ENSP will have **no contractual basis to recover the network charges** recovered by the retailer ” (Living Utilities, submission on the draft report, p. 3)

## Why is network billing important to on-market customers embedded networks?

“Concerning, there is no obligation on the retailer to let the ENSP know whether it has or has not charged the customer for network charges. In the absence of any awareness as to whether the retailer has or has not, the ENSP will likely charge the customer...As such, it is highly foreseeable that **the customer will get charged by the retailer and the ENSP**” (Living Utilities, submission on the draft report, p. 3)

## Potential solutions - standardisation

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- Default shadow networks charges



- Network charging and billing procedures



- Network billing and payment intermediary service



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Network billing is a key to retail market competition in embedded networks

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## Default shadow network charges

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- Stipulate in the NER that a shadow network charge is to be used unless otherwise agreed to between the retailer and the ENSP
- The shadow network charge is the same as the network charge that would have applied to the embedded network customer if it were on the DNSPs distribution network



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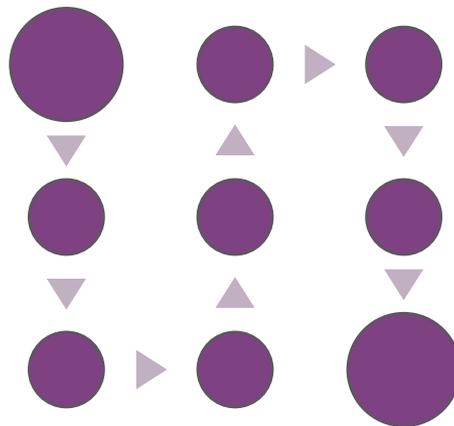
Provide certainty on network costs through default shadow network charges and procedures

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## Network charging procedures

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- Require AER or AEMO to develop shadow network charges procedure that details:
  - the methodology to be used to calculate the charges
  - information to be included in a statement of charges
  - time and manner of payment
  - Any other matter required for efficient, timely and secure payment
- Implement new MSATS procedures for network tariff assignment in embedded networks



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Provide certainty to all parties through network charges procedures

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## Network billing and payment intermediary

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- An intermediary may facilitate transactions between ENSPs and retailers.
- This could be made a default arrangement from which retailers could opt out.
- Potential parties that could perform an intermediary role include:
  - **AEMO** – similar wholesale market functions and has access to data
  - **DNSPs** – currently performs network billing for standard supply customers
  - **Other?**



Direct billing and payment between retailer and ENSO or introduce an intermediary?

## Non-payment of network charges

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- Consideration needs to be given as to whether the risk should be managed by the ENSP through:
  - contractual arrangements with its counterparties
  - specific arrangements need to be implemented to manage the risk of non-payment of network charges.
- Mechanisms available to economically regulated DNSPs will not be available to ENSPs eg. Cost pass throughs
- At the extreme, these risks could lead to cascading defaults resulting in adverse outcomes for consumers in embedded networks, such as a discontinuance of supply at the parent connection point.

## Non-payment of network charges cont'

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- Arrangements that leave this risk with the ENSP imply that some risk would be borne by customers in the embedded network.
- Alternatively, it may be possible to design arrangements that allocate this risk more broadly and therefore mitigate its effects.
  - This might include extending the risk to customers connected to all ENSP networks or, further, to all standard supply customers in a DNSP network area or NEM region.
- The design of any such arrangements would likely interact with any decisions made regarding the role (if any) for a billing intermediary.

## Questions

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1. Can stakeholders identify any implementation issues in implementing 'shadow network charges' at on-market connection points?
2. What potential arrangements could make network billing and payment simpler for retailers e.g. number of ENSPs, prescriptive procedures, file format?
3. Does the multiplicity of embedded network service providers make direct network billing between embedded network service providers and market retailers complex?
4. Would having an additional intermediary make it easier for retailers, or would it introduce complexity and costs? If stakeholders consider there will be additional costs, on whom would these fall?
5. Would introducing an intermediary make resolving billing enquires more difficult?
6. Are DNSPs willing to take on an additional direct role in embedded network billing and payment? Should payment go through the ENSP or be netted off from parent connection point?
7. Do stakeholders consider that specific arrangements should be introduced to manage the risk of non-payment of network charges by retailers of on-market embedded network customers? If so, how would these arrangements be designed and how would risk be allocated?

# IMPLEMENTATION – ISSUES FOR DISCUSSION

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## System implementation implications - AEMO

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- Context – AEMO is currently progressing changes to the Market Settlement and Transfer Solution (MSATS) system as a result of settlement rule changes;
- ENs are catered for in MSATS today – including adoption of ENM changes through the Power of Choice program:
  - Child connection points recognised
  - Rules for connection point movement on and off market / in and out of an embedded network established (NMI Status change)
  - ENM function, rights and obligations established in procedures and systems
- No material gaps have been identified regarding required AEMO system functionality for ENs at this stage.

## System implementation implications - AEMO

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- Treatment of ENs for settlement is being considered in the Global Settlement rule change process – likely that MSATS capability will be maintained as a result;
- The low volume interface (LVI):
  - Will be maintained for those that wish to use it;
  - EN Rule may mean that continued use of LVI for some parties is impractical (e.g. NMI creation and maintenance)
- AEMO may perform bulk data loading if required (different from the BCT)
- If MSATS system changes are required, however minor they may be, planning will need to consider current MSATS related change processes and timeframes
  
- Questions?

# RECAP AND NEXT STEPS

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## Updating the regulatory frameworks for embedded networks: next steps

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**Initiation of  
review**

*August 2018*



*October 2018*

**Stakeholder  
workshop**

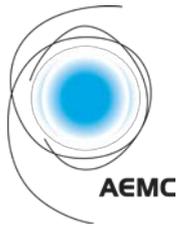
**Publication of  
draft report**

*December 2018*



*May 2019*

**Publication of  
final report**



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