

Improving Security Frameworks: Transition Approach



FINAL VERSION

Purpose of external transition approach

This document outlines the process for TNSPs and Providers to commence (or transition to) security service enablement under the ISF Rule from 2 Dec 2025, including:

- ❖ Submission, assessment and obtaining AEMO approval of system security agreements;
- ❖ Demonstrating system preparedness, including via AEMO's Market Trial and extended support period
- ❖ AEMO's process for transitioning from directions to enablement, noting expected timeframes and dependencies on solution readiness;
- ❖ Participation in accordance with the Security Enablement Procedure

Delivery of automated security enablement solution

Phased rollout of automated enablement system and what this means for Participants

- This Transition Approach reflects current system solution delivery plans that AEMO has in place to ensure it is able to meet its rule obligations, proactively manage transition risks, and support TNSPs and Providers to progressively transition to new system security enablement arrangements given considerable delivery complexity.
- AEMO is working to ensure required business processes are in place to support system security enablement functions from the go-live date of 2 December 2025. Some automated scheduling functions, and other non-core components of the solution will be delivered via subsequent releases and phases following the Rule commencement date, including Release 1.1 in mid-2026.

❖ To manage the phased rollout, AEMO will:

- Make updates as necessary to its Market Trial Strategy and Plan, so relevant Participants can plan accordingly.
- In some cases, in particular where 'manual' enablement processes are already in place for a security service prior to 2 Dec 2025, work on a case-by-case basis on timing of transition to automated enablement of system security services.
- Continue its regular stakeholder engagement processes to facilitate industry readiness and support.

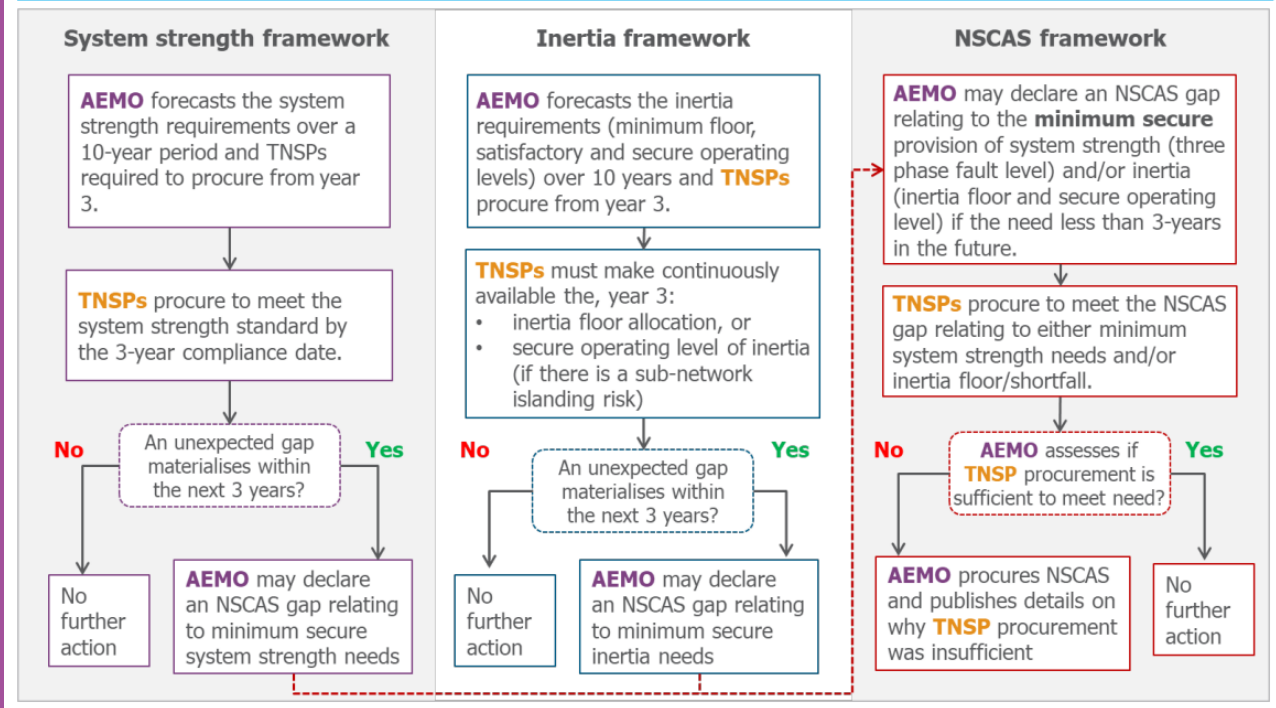
❖ The overall impact of a phased solution delivery is expected to be minor for participants:

- AEMO is prioritising solution readiness of participant-facing interfaces, including external user interface and reporting functions, to minimise impacts for TNSPs and Providers.
- Further solution updates will be timed to allow efficient management of system security service enablement as volumes increase.

ISF RULE CONTEXT

- ❖ In March 2024, the AEMC made a final determination of the *Improving security frameworks for the energy transition* rule change (ISF).
- ❖ ISF empowers AEMO to assess and enable the necessary security services in operational timeframes to ensure the power system is secure day to day. It addresses system security challenges during the transition by reducing reliance on directions and providing better incentives for participants to invest in providing system security in the longer term.
- ❖ The enablement of security services under ISF will commence on 2 Dec 2025 in accordance with the Security Enablement Procedures (SEP)
- ❖ This Plan must be read in conjunction with the ISF HLIA, ISF Rule, SEP and Draft Market Trial Strategy.

Figure 3.8: Interactions between system strength, inertia, and NSCAS frameworks

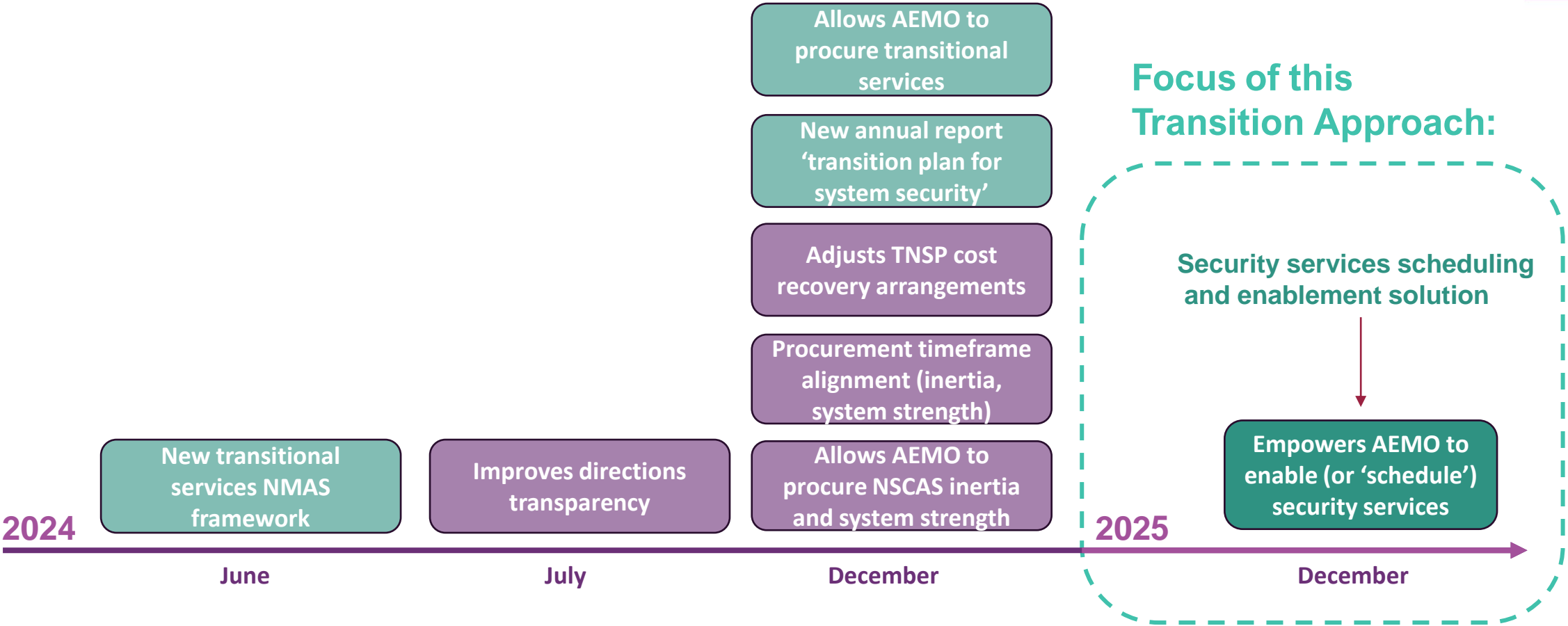


Source: AEMC

Key resources

- [HLIA](#)
- [AEMC rule change documentation](#)
- [Security Enablement Procedures consultation](#)

Background: Key Elements of ISF rule



- Change - live
- New - live
- New – not live

Background: What services are being enabled from 2 Dec 2025?

Requirements	Service	Proposed enablement process
Minimum system security requirements	Inertia	Automated <i>system security services enablement</i> or fallback to manual system security services enablement as required.
	System strength	
	NSCAS	Manual <i>system security services enablement</i> ; or automated in the security service scheduler if service definition and contract structure permits; or automated via alternative AEMO system.
	Transitional	
	Other	
Stable voltage waveform requirements	System strength	Refer to Section 5 of the SEP for enablement process. Will not be enabled by AEMO from 2 Dec 2025. AEMO and TNSPs currently working through requirements.

Focus of this Transition Approach

Refer to [Security Enablement Procedure consultation](#) for further details.

KEY MILESTONES

Ongoing to 31 Aug 2025

Limits advice submission

TNSPs provide incremental updates to limits advice to AEMO (substantive limits advice received by 31 May 2025)

Ongoing to 1 Sept 2025

TNSP contracting

Contracting in process (for both existing and new agreements)
Ideally contracts complete and submitted to AEMO by 1 Sept to facilitate inclusion in Market Trial

From 2 Sept 2025

Contracts Approval Process

Contracts Approval Process commences for submitted contracts as received

27 Oct 2025 to end Feb 2026

System preparedness - Market Trial & extended support period

TNSPs and Providers may participate in Market Trial as the first opportunity to demonstrate readiness in pre-production; to be followed with extended support period

From 2 Dec 2025

Rule commencement

Rule commencement date for enablement of system security services contracts
AEMO will commence its transition to new enablement processes

From Feb 2026

AEMO will make agreements with TNSPs/ Providers for later contracts to progress through approval process and commence enablement

TNSP CONTRACTING & PROVISION OF LIMITS ADVICE TO AEMO

TNSP contracting & provision of limits advice to AEMO

- ❖ AEMO has been working with TNSPs to establish the requirements and timeframes for key milestones associated with system security enablement.
- ❖ Under the [*Efficient management of system strength*](#) rule (Oct 2021), TNSPs (as System Strength Service Providers for each region) are responsible for proactive provision of system strength services under the new system strength framework. TNSPs are working through their system strength RIT-T processes (see [Transgrid](#), [Powerlink](#), [ElectraNet](#), [AVP](#), & [TasNetworks](#)) to determine preferred approaches to meet their system strength requirements and are developing *system security service agreements* for provision of these services via enablement by AEMO where required.
- ❖ AEMO has provided guidance on the content and structure of *system security service agreements* in its Security Enablement Procedures and is seeking contract submissions by 1 September 2025 to enable sufficient time for assessment and conditional approval prior to Market Trial, which is the first opportunity to demonstrate system preparedness.
- ❖ In addition, TNSPs have been requested to provide limits advice to AEMO enable the minimum system security requirements in the operational timeframe to be set. Key dates for provision of limits advice include:
 - 31 May 2025 for substantive updates to existing limits advice.
 - 31 August 2025 for incremental updates to existing limits advice, including minor coefficient updates or inclusion of a new system strength unit within limits advice.

CONTRACTS APPROVAL PROCESS

Contracts approval process

Contract approval form submission

- Contract approval form submitted by TNSP to AEMO via email
- Includes submission of key contract parameters
- Security Enablement Procedure (SEP) provides guidance on content & structure

Refer to:

The image shows the cover of the 'Security Service Contract Approval Form' in a draft state. It features the AEMO logo and a grid of icons representing various energy services. Below the title, there is a table for metadata including 'Prepared by', 'Version', 'Effective date', 'Status', and 'Approved by'. At the bottom, it lists the 'Approved for distribution and use by' and the 'Date'.

Contract approval & technical assessment

- AEMO will use best endeavours to review the contract to assess, within 20 business days:
 - Alignment of contract parameters with requirements in the NER & SEP
 - Technical specifications and performance standards and arrangements necessary to give instructions to enable or cease provision of the system security service.
- Communications protocol to be agreed.
- AEMO must provide the reasons for withholding approval and may advise the changes it requires to be made. If approval is withheld, progression to conditional approval may only occur once additional information is received, and request is resubmitted

Refer to:

The image shows the cover of the 'Security Enablement Procedures' document. It features the AEMO logo and a grid of icons. Below the title, there is a table for metadata including 'Prepared by', 'Document ref', 'Version', 'Effective date', 'Status', and 'Approved by'. At the bottom, it lists the 'Approved for distribution and use by' and the 'Date'.

NER clause 5.20B.6
(relating to inertia services)

NER clause 5.20C.4
(relating to system strength services)

Demonstrate system preparedness

- Via pre-production environment – Market Trial, extended support period or BAU pre-prod testing process
- Participant verifies ability to interact with AEMO's systems, submit required information, receive enablement instructions, access reports etc

Refer to:

The image shows the cover of the 'Improving Security Frameworks (ISF) Phase 1.0 Market Trial Strategy' document. It features the AEMO logo and a grid of icons. Below the title, there is a table for metadata including 'Prepared by', 'Document ref', 'Version', 'Effective date', 'Status', and 'Approved by'. At the bottom, it lists the 'Approved for distribution and use by' and the 'Date'.

Service registration & approval to commence enablement

- Once all other steps are complete:
 - AEMO will register the contract in its contract management system,
 - the unit will be considered to be a System Strength Production Unit or Inertia Unit (as relevant) and
 - enablement for system security services may commence in accordance with SEP

Refer to:

The image shows the cover of the 'Security Enablement Procedures' document. It features the AEMO logo and a grid of icons. Below the title, there is a table for metadata including 'Prepared by', 'Document ref', 'Version', 'Effective date', 'Status', and 'Approved by'. At the bottom, it lists the 'Approved for distribution and use by' and the 'Date'.

Content, structure & submission of contracts

- ❖ Contract approval form and supporting documentation may be submitted to AEMO via email. AEMO has requested that contract approval forms are submitted by 1 September 2025 to enable sufficient time for contract review prior to Market Trial commencement. AEMO will have a BAU process to manage contracts submitted after this timeframe.
- ❖ Under NER 4.4A.6(a)(3), AEMO must establish the minimum or recommended requirements to be included in TNSP *system security services* agreements. The [Security Enablement Procedures](#) set out these requirements, including:
 - General agreement structure
 - Service provision definition, including service parameters
 - Financial structure
 - Intended scheduling arrangements
 - General requirements.
- ❖ The contracts approval form will require TNSPs to provide standard details on the contract, asset, operational parameters, and financial details.
- ❖ Note regarding **contracts entered into prior to 31 August 2025**: The minimum or recommended requirements included in the full Security Enablement Procedures may differ from those included in the Provisional Procedures. However, NER 11.168.2(e) provides that any agreement for the provision of system security services entered into by a TNSP before 31 August 2025 that is compliant with the [Provisional Security Enablement Procedures](#) is deemed to be compliant with the minimum or recommended requirements per new clause 4.4A.6(a)(3) in the full Security Enablement Procedures to the extent they differ from those specified in the Provisional Procedures. Parties to an agreement will also need to be prepared to account for information published in and future compliance with any requirements in the full Security Enablement Procedures relating to new clause 4.4A.6(a)(1), (2) or (4).

Contract approval & technical assessment

- ❖ AEMO will use best endeavours to review contract documentation provided by the TNSP within 20 business days to verify that the contract fulfills the requirements in the SEP (or Provisional SEP as relevant) and relevant NER clauses and will seek additional information from TNSPs where required.
- ❖ NER clauses 5.20C.4(d)(1) and 5.20B.6(d)(1) require Inertia Service Providers and System Strength Service Providers respectively to provide the technical specification and performance standards for the relevant security service. This should be submitted alongside the contract approval form.
- ❖ AEMO will require TNSPs to verify that assets being contracted to provide security services are operating in accordance with their Generator or Integrated Resource Provider Performance Standards and advise whether it is subject to a change or alteration process (e.g. NER 5.3.9 Alteration of a generating system or integrated resource system).
- ❖ Where an asset is subject to an alteration process to become able to provide a system security service, AEMO may provide contract approval subject to approval of the required changes.
- ❖ A communications protocol for enablement is to be agreed with AEMO under NER 5.20C.4(d)(2) and NER 5.20B.6(d)(2). This will primarily clarify how operational information about the security service will be communicated to AEMO which can be via:
 - ❖ The Security Service Management Portal
 - ❖ Network Outage Scheduler (applicable for always-on agreements with synchronous condensers)
 - ❖ Other (for example, those applicable for current arrangements in Tasmania).
- ❖ If AEMO withholds approval, it will advise the service provider its reasons, and, where applicable, will advise of the changes it requires to be made. The service provider must amend its request to address the matters identified by AEMO and submit a new request for approval.
- ❖ AEMO may withhold approval where, *for example*:
 - ❖ It considers contract parameters are not aligned with SEP or NER requirements (see 5.20C.4 and 5.20B.6)
 - ❖ Documentation is incomplete or insufficient to enable AEMO to verify technical specifications or performance standards as required
 - ❖ AEMO does consider that the contracted service being made available is not capable of being enabled by AEMO (NER 5.20C.4(b2) and 5.20B.6(b2))

Demonstrating system preparedness

- ❖ TNSPs/ Providers will need to demonstrate system preparedness prior to obtaining full approval for enablement from AEMO.
- ❖ The first opportunity to demonstrate system preparedness is the Market Trial and the subsequent extended participant support period.
- ❖ Demonstrating system preparedness involves accessing the pre-production environment to demonstrate certain capabilities, including testing:
 - Ability to access the Security Service Management (SSM) User Interface.
 - Ability to view, submit and maintain unit's availability and other operational information via the User Interface and/or API.
 - Ability to view and respond to enablement instructions and amendments via the User Interface and consume enablement instructions via the Participant Data Replication Tool or API.
 - TNSP ability to receive information required to enable contract settlement and visibility of daily reporting.
- ❖ Requirements for demonstrating system preparedness may vary based on the agreement and communications protocol; for example, relevant always-on contracts may have a simpler process whereby the TNSP utilises NOS for reporting outages.



Market Trial Strategy & Test Plan

- AEMO has published a Final Market Trial Strategy
- This will be followed by a more detailed Draft Market Trial Test Plan on 29 July
- Refer to these documents for further information on Market Trial participation and settings

Participation in Market Trial prior to contract approval and service registration

- It is a pre-requisite that contract information and DUIDs are in the pre-production system in order to participate in the Market Trial.
- As such, the Contract Approval Process must have been initiated, and AEMO agreement sought, to participate prior to contract approval.

Service registration & approval to commence enablement

❖ The following requirements must be fulfilled in order for AEMO to commence enabling system security contracts:

- ✓ Any relevant change/alteration processes relating to performance standards are complete
- ✓ All aspects of system preparedness have been demonstrated in pre-prod/ Market Trial
- ✓ All other relevant requirements in the NER and AEMO procedures have been fulfilled.

❖ Once all requirements have been fulfilled:

- AEMO will register the contract in its contract management system
- Where the service is procured under an agreement with a Generator or Integrated Resource Provider, the generating unit or bidirectional unit will be considered by AEMO to be a System Strength Production Unit or Inertia Unit as relevant*.
- The system security service may be enabled by AEMO in accordance with the Security Enablement Procedure.

Existing system security services agreements

- ❖ There are a small number of existing agreements that TNSPs and AEMO will be utilising for system security prior to commencement of ISF, typically under bespoke enablement arrangements.
- ❖ AEMO will manage the transition of these agreements on a case-by-case basis in consultation with affected parties.
- ❖ Depending on the nature of the agreements, they may be transitioned alongside new agreements to the new system security enablement arrangements, or transitioned in accordance with the Security Enablement Procedures at a later stage.

TRANSITIONING TO ENABLEMENT

Adjustments to timing and approach for Market Trial

Sep 2025	Oct 2025	Nov 2025	Dec 2025	Jan 2026	Feb 2026
	Initial Market Trial timeframe				
		New Market Trial timeframe	Extended transition support period		

- ❖ The Transition Approach incorporates the Market Trial as a core part of the process of integration to the new enablement arrangements. Market Trial is the first opportunity to demonstrate readiness and obtain full approval for system security services agreements to be enabled.
- ❖ To better provide for a risk-managed approach to the introduction of new services enablement, AEMO has adjusted the Market Trial period to commence in late October, followed by an **extended transition support period** for new security providers. This will enable:
 - AEMO to better support TNSPs and Providers as they commence enablement, better align with the timing of in-process agreements, and support greater maturity of participation.
 - Lower solution risk at trial commencement.
 - More effective risk management over the summer period, during which there is a higher risk of challenging operational conditions and power system events.
- ❖ The extended support period timeframes overlap with the go-live date of 2 Dec 2025 to provide more flexibility and support for contracts transitioning to enablement.
- ❖ AEMO will work closely with relevant TNSPs and Providers to support participation, including coordination and scheduling into the extended support period.

Transitioning from directions to enablement

- To proactively address transition complexity and risks associated with the introduction of new enablement capabilities and services, AEMO will take a progressive and risk-managed approach to the transition to system security enablement.
- This includes utilising manual enablement and/or fallback to directions for a period post commencement to manage power system security through the transition to more automated enablement processes. This will be undertaken in accordance with the Security Enablement Procedures.
- AEMO anticipates that the volume of contracts that may be affected where manual enablement or fallback to directions is required is small, due to the number of anticipated system security actions and the number of contracts expected to be available. This is expected to limit the impact of delayed automated enablement for both AEMO and participants.
- AEMO is prioritising the development of participant-facing aspects of the solution to minimise the impact of manual enablement on participants as much as possible. This includes the user interface for inputting dynamic contract variables including availability and receiving enablement instructions, and reporting functions. The next slide provides a high-level summary of impacts.
- Where required, there may need to be re-testing of Provider ability to interact with AEMO's automated enablement system at a future date.

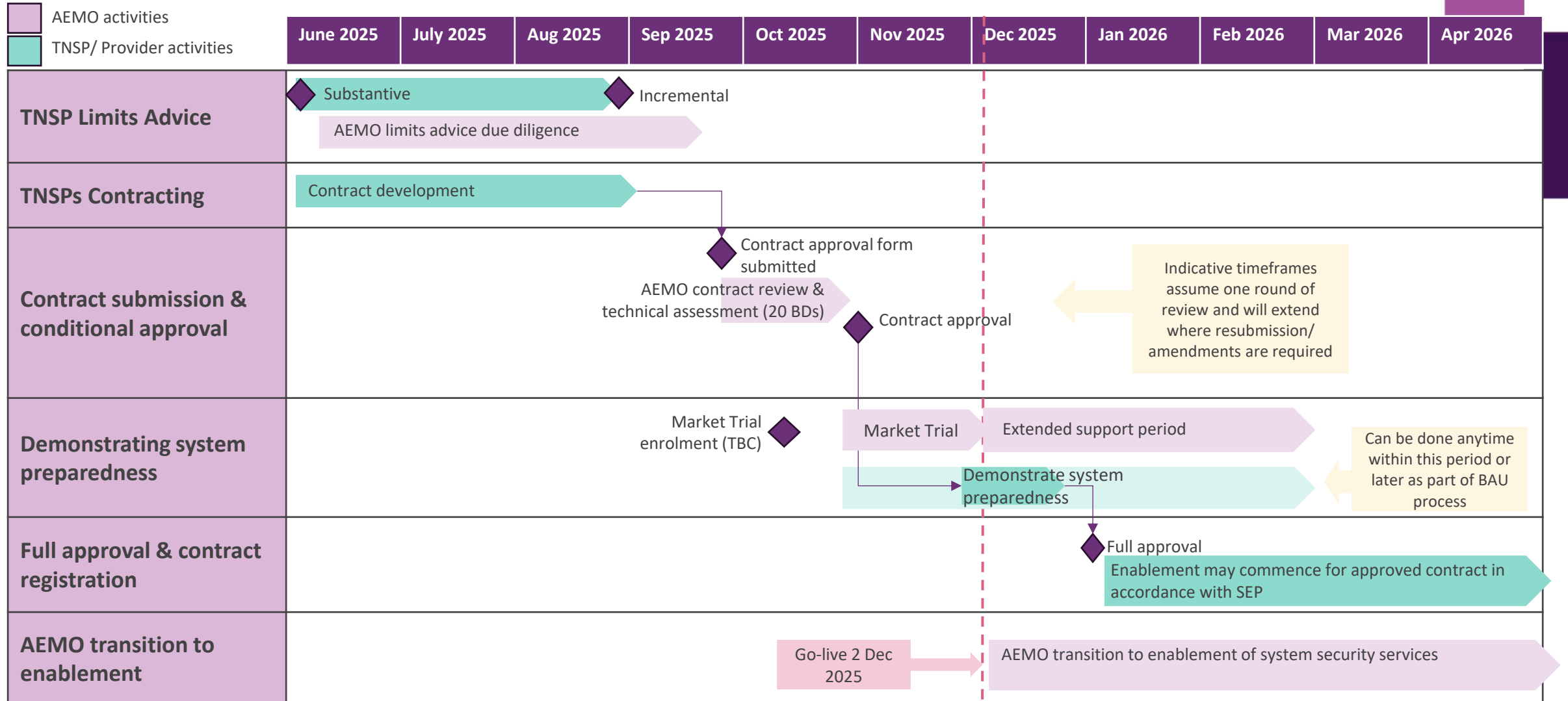
Impacts of AEMO's staged digital system release within the transition approach

	Release 1 (Dec 2025)	Release 1.1 (mid-2026)
System security management (SSM) portal user interface: Ability for participants to manage variable contract parameters, update availability, access enablement instructions & data transfer via API	✓ Function for participants to access & manage data inputs via user interface largely unaffected.	✓
Automated security assessment and scheduling: Determination of the need to schedule system security services to address operational security gaps and schedule services to address the identified gaps	! Partial manual gap assessment, scheduling and creation of enablement instructions determined through business processes. Providers will not receive indicative rolling DUID schedules until a later release. Note that AEMO may not have sufficient contracts in place to fully address a system security gap and may direct in combination with enablement instructions.	✓ Note that AEMO may not have sufficient contracts in place to fully address a system security gap and may need to direct in combination with issuing enablement instructions.
Issuing enablement instructions	✓ Participants will receive enablement instructions and AEMO will be able to manually create, amend, cancel and issue enablement instructions, with more limited functionality. Access via web portal or wholesale data interchange.	✓
Daily reporting: on previous day enablement quantities, estimate of costs, and reasons for enablement, per NER 4.4A.75	✓ Daily reporting requirements will be delivered in accordance with the NER, with additional functionality to be delivered in future releases. Access via web portal or wholesale data interchange.	✓
Settlements for transitional services	✓	✓

Consolidated transition approach

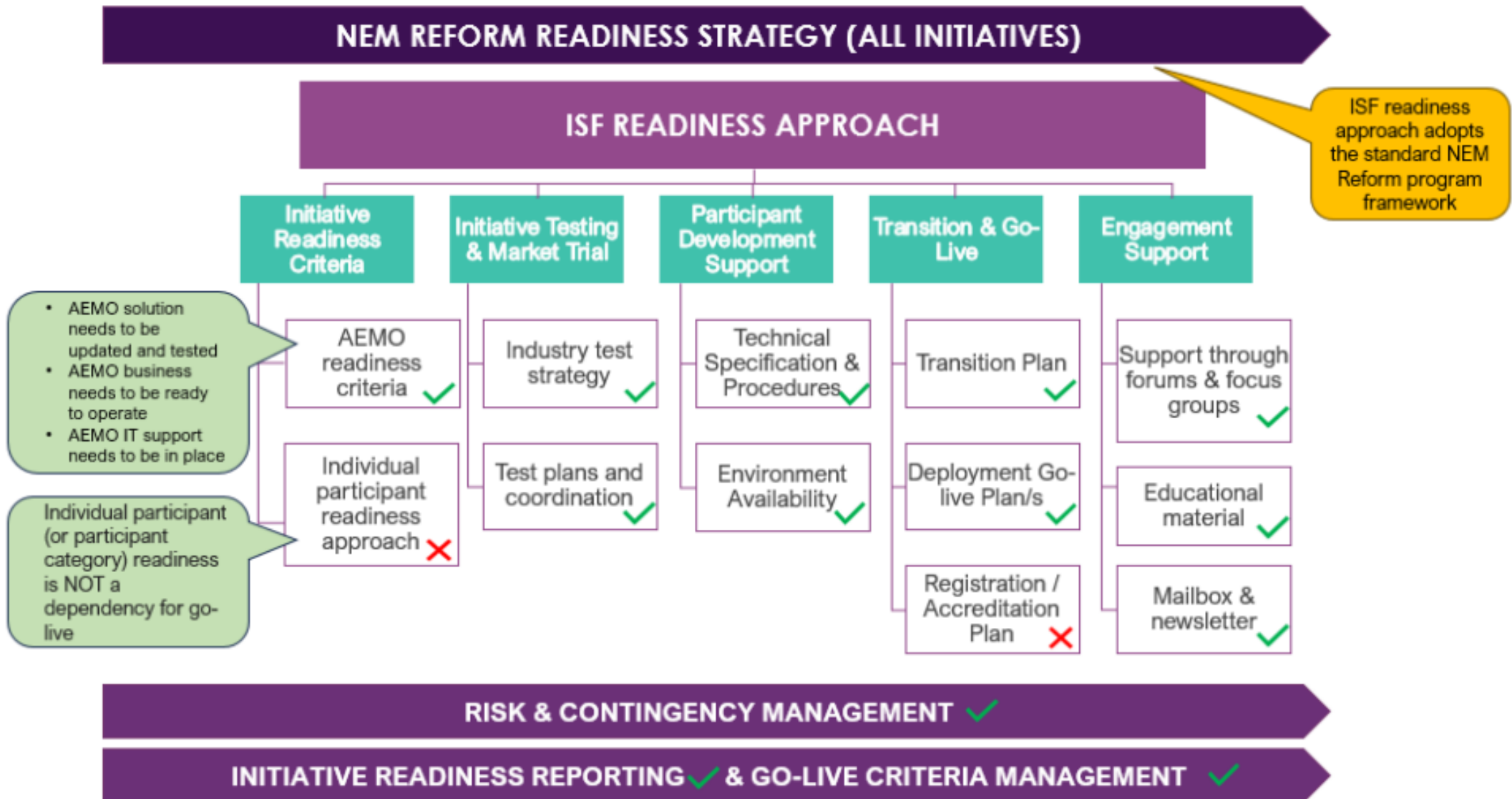


The example view below provides a summary of the **indicative** timeframes for transitioning a contract from submission to full approval, with system preparedness activities undertaken as part of the extended support period.



READINESS SUPPORT

ISF Readiness Approach



Readiness support for participants

Forum/ Resource	Description/ Link
ISF TNSP Working Group	A monthly working group facilitating collaboration and support for TNSPs.
TNSP-AEMO 1 on 1 collaboration	AEMO and TNSPs meet regularly to work through issues specific to their participation, contracting, limits advice, etc.
Dedicated forums	AEMO runs dedicated forums to keep industry informed of key developments, including key consultation processes. An upcoming forum in June will provide a briefing on the status of the ISF project and the outcomes of the first round of the Security Enablement Procedures consultation.
Go-live plan	To be published October 2025
Industry Test Working Group (ITWG)	Market Trial Test Plan for coordinated activities will be developed in collaboration with participants reflecting the scope of the trial established in the Market Trial Test Strategy. AEMO will run ITWG Q&A sessions during the Industry Test period to support participants. Sign up at NEMReform@aemo.com.au .
Market Systems User Group (MSUG)	MSUG sessions are available for additional support on tech specs, which are released at a monthly iteration.
NEM Reform Forums	Program Consultative Forum Electricity Wholesale Consultative Forum Implementation Forum
ISF initiative webpage	https://aemo.com.au/initiatives/major-programs/improving-security-frameworks-for-the-energy-transition
Key procedure consultations	Security Enablement Procedures
High-Level Implementation Assessment	HLIA
Market Trial Strategy & Test Plan	Revised Draft Market Trial Strategy
Go-live criteria & contingency management	AEMO will develop initiative go-live criteria for the initiative and manage progress and contingency arrangements with participants in the lead up to rule commencement .



For more information visit

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