12/11/2025

# FASS Programme

## System Services Code Development Working Group

November 2025

# Agenda

## Working Group Meeting 7

12th November 2025

1. Welcome and Introduction
2. Residual Availability Determination
3. System Services Supplier Charge Queries from Working Group Meeting #6
4. AOB

# SEM Committee Decisions to Date:

The decisions as set out in the SEM Committee publications need to be transposed into a binding set of market rules which require extensive input and review from the Working Group. The System Services market rules should reflect the decisions included in the following SEM Committee decision documents:

- SEM-21-021 System Services Future Arrangements - Decision Paper 1
- SEM-22-012 System Services Future Arrangements High Level Design Decision Paper 2
- SEM-23-103 System Services Future Arrangements – Detailed Design & Implementation – Phased Implementation Roadmap - Decision Paper 3
- SEM-24-066 Future Arrangements for System Services – DASSA Design Decision Paper
- SEM-24-074 Future Arrangements for System Services Product Review and Locational Methodology decision paper
- SEM-25-007 Future Arrangements for System Services – System Services Charge
- SEM-25-011 Future Arrangements for System Services – DASSA Volume Forecasting Methodology Decision Paper
- SEM-25-031 Future Arrangements for System Services – The Gap Decision Paper
- SEM-25-056 Future Arrangements for System Services – Future Arrangements for System Services - DASSA Top Up Mechanism Decision Paper

Note: The System Services Code Working Group will not re-open any previous SEMC Decisions.

# Table of Contents – PEV 3

| Section Ref. | Code Section |
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| 2 | Background and Interpretation |
| 3 | Legal and Governance |
| 4 | Participation, Accession and Registration |
| 5 | Qualification |
| 6 | Auction format of DASSA |
| 7 | Secondary and Bilateral Trading |
| 8 | Obligations |
| 9 | Residual Availability Determination |
| 10 | All- Island System Service Supplier Charge |
| 11 | Long Term Contracts |
| 12 | Delivery – Performance Monitoring |
| 13 | Transition Arrangements for existing DS3 contracts - Migration |
| 14 | Settlement |
| 15 | Appendices |

**Future SEM Committee Decisions:**

- Parameters and Scalars Consultation (Price Caps, Commitment Obligations)*
- Second Product Review*

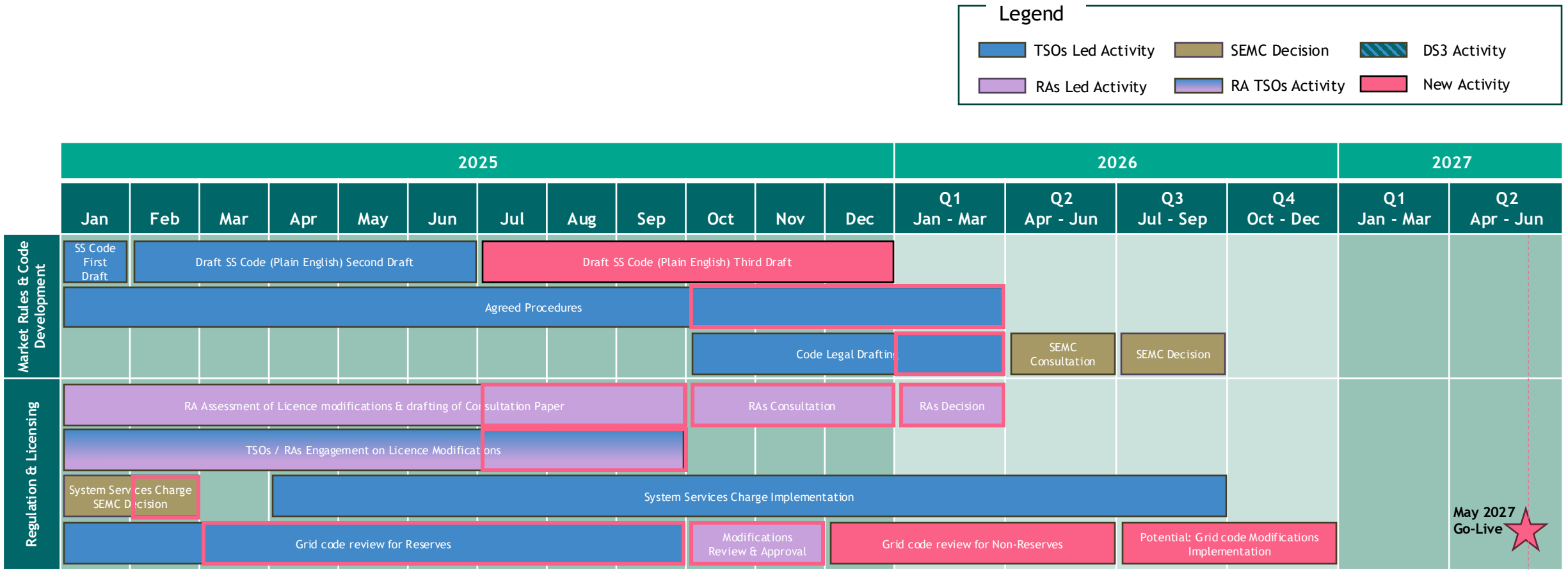
Affected Sections

The timing of the following activities are also considered:

- Licence modification required to implement this framework (Q4 2025)Therefore, it is proposed to commence work on these topics later in the process in line with publication of the relevant SEM Committee decisions.

***Note:** Finalisation of the Plain English Version (PIR milestone FASS.M22) is dependent on the timely progression of business design activities concluding with the publication of the respective SEMC Decisions.

# Phased Implementation Roadmap - Level 1 V3.0




PIR V4.0 is in development

# Chapter 9: Residual Availability Determination

# Key Features of the RAD (DASSA Top-Up Mechanism)

**Key Points**

- An ex-post process to bridge any gap between the availability of System Services via DASSA Orders from the DASSA and Secondary Trading Markets, and the real-time system requirements.
- Service providers will be obligated to declare their availability to provide a service to the TSOs if they are technically capable of doing so, irrespective of whether they hold a DASSA Order for the service volume.
- The RAD will procure the same System Service Products as is in the DASSA, reflecting locational and quality requirements.
- RAD Offers will be separate to DASSA Offers, but submission will occur in the same window. The RAD Clearing Process will occur ex-post in a batch for all Trading Periods in a Billing Period.
- The RAD will operate for a period of two years from commencement of the DASSA arrangements. Operation of the RAD may be extended as part of the RAD review process, subject to recommendation by the TSOs and approval thereof by the SEM Committee.

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# Overview



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# RAD Timing Format and Participation

The RAD will procure the same set of System Services Products (in both the Upward and Downward directions) as the DASSA and will include the same Quality Categories and Locational Zones, in addition to All-Island requirements.

Service Providers are not obligated to submit RAD Offers for their Providing Units. However, there is an obligation to declare the availability of their Providing Units to provide services.

The RAD will operate on an operating day basis, using the DASSA Auction Timeframe, and the same set of 48 Trading Periods per Auction Timeframe as the DASSA.

The RAD Offer submission window will align with DASSA Gate Opening and DASSA Gate Closure at 15.30 D-1. However, the RAD Auction will be run ex-post after the Auction Timeframe, not at the same time as the DASSA.

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# Submission of RAD Offers

- A RAD Offer may contain between one and ten (inclusive) price-quantity pairs, with price increasing with the aggregate quantity in each pair.
- Minimum acceptable values for the quantity in each step will be implemented.
- A Price Cap and Price Floor will apply to the prices in a RAD Offer (will be determined as part of Parameters and Scalars workstream).
- Where a RAD Offer has been submitted for more than one System Service Product in respect of a Providing Unit, the characteristics of the response capability must be consistent across all products. For example, the Providing Unit cannot have Dynamic Response in the provision of POR, and Static Response in the provision of SOR.
- Only one quality type per product is permitted per Providing Unit. For example, the Providing Unit may not submit multiple RAD Offers for POR with different quality levels applying to each one.
- As all RAD Offers will be Divisible, no price-quantity pair from a Providing Unit can be accepted unless all preceding price-quantity pairs have been accepted, and there is no requirement for an explicit sequential filling guarantee.

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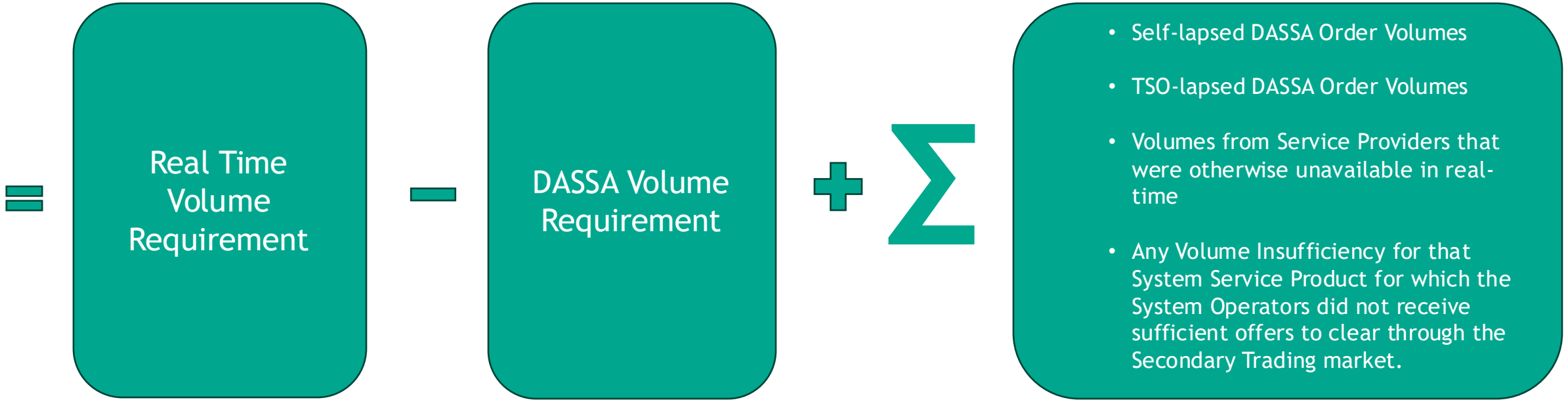
# RAD Auction Process: Volume Requirements

RAD Volume per System Service Product is determined ex-post:

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# RAD Auction Process: Inputs

- The RAD Auction will be run in a batch process, for all Trading Periods within a Billing Period.
- **Inputs:**
  - DASSA Clearing Prices;
  - Final DASSA Orders for each Service Provider/Providing Unit
  - For calculation of RAD Volume Requirements;
    - Awarded DASSA Orders;
    - Self-Lapsed DASSA Orders Volumes;
    - TSO-Lapsed DASSA Orders Volumes;
    - Volumes of DASSA Orders that otherwise could not be provided in real-time and volumes associated with unfulfilled Volume Insufficiency;
    - Real-time System Service Product requirements
  - RAD Offers
  - Real-Time Capability to deliver System Services of each Providing Unit (for calculation of each Providing Unit's RAD Availability)
  - Real-time System Service Product requirements

  - There may be a defined RAD Auction Threshold (which may be set at zero).

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# RAD Auction Process: Final RAD Orders

- For Providing Units for which a RAD Offer was successfully submitted:
    - If the cumulative volume in the RAD Offer price-quantity pairs exceeds the Real-Time Availability of the Providing unit, the volume in those price-quantity pairs will be truncated by the Real-Time Availability;
    - If the cumulative volume in the RAD Offer price-quantity pairs is exceeded by the Real-Time Availability of the Providing Unit, the additional available capacity will be added to the RAD Offer at the Default Price (or the lowest price in the RAD Offer, if the RAD Offer contains ten price-quantity pairs with no existing pair at the Default Price).
- For Providing Units for which a RAD Offer was not successfully submitted (but which are otherwise eligible to participate in the RAD):
    - The Final RAD Offer will be a single price-quantity pair, with the quantity equal to the Real-Time Availability of the Providing Unit, and the price equal to the RAD Default Price.

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# RAD Auction Clearing

- The RAD Auction process will use the same optimisation as the DASSA (with the objective to determine the RAD Assignments based on RAD volume requirements while respecting quality and locational constraints at least cost).

- RAD Clearing Prices will be capped at the DASSA Clearing Price for the corresponding System Service Product, Trading Period, Locational Zone and Quality Category.

- The RAD Auction Clearing outputs will be:
  - The cleared volume in each RAD Order, in respect of a Trading Period, Providing Unit, and System Service Product (by Quality Category and Zone as applicable).
  - The RAD Clearing Prices in respect of a Trading Period and System Service Product (by Quality Category and Zone as applicable).

For Providing Units that had capacity that was available for provision of a System Service Product in real-time, but had no RAD Offer submitted in respect of that capacity, the TSOs will assign a Final RAD Offer with the RAD Default Price to that capacity at a default price of £/€0.

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# RAD Outputs and Publication

The TSOs will publish the following information following successful completion of each RAD Batch Auction:

- The total RAD quantity cleared of each System Services Product (by Zone and Quality Category).
- The quantity cleared of each System Services Product by Providing Unit (by Zone and Quality Category).
- The RAD Clearing Prices for each System Services Product (by Zone and Quality Category), both in (€/MW) and(£/MW).

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# RAD Monthly Reports

The System Operators will submit monthly RAD Reports to the Regulatory Authorities on RAD performance and outcomes. RAD Reports will contain the following information (Feasibility study is underway):

- The number of trading periods in which the RAD was used; and for each of those:
    - the total volume of all available capacity at BM gate closure (including Providing Units without a DASSA Order) for each Trading Period for each System Services Product;
    - the total volume of all available reserves at the end of the trading period for each System Services Product;
    - the total volume of Providing Units which have maintained consistent reserve availability from BM gate closure through to the end of the Trading Period for each System Services Product for which the RAD was required;
    - the System Services Product volumes traded through the Secondary Trading;
    - the System Services Product volumes procured through the Secondary Trading market by the TSOs in respect of Volume Insufficiency; and
    - the System Services Product volumes the TSOs sought to procure in the Secondary market in respect of Volume Insufficiency but did not receive offers.
- The total amount paid out in respect of Providing Units through the RAD;
- The total ex-ante volumes procured through the DASSA for each Trading Period;
- The real-time requirement for each Trading Period;
- The volume of all DASSA contract holders who become unavailable as a result of their own actions for each trading period; and
- The volume of all DASSA contract holders who become unavailable as a result of TSO actions for each trading period.
- The volume of all LPF contract holders who became unavailable as a result of their own actions for each trading period.
- The volume of all LPF contract holders who become unavailable as a result of TSO actions for each trading period.
- Trends in the RAD and DASSA Clearing Prices as they develop over time
- Where the TSOs are recommending extending the use of the RAD for a further two years they shall include their plan and timeline to phase out the RAD.

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# Review of the RAD

The TSOs will undertake a review of the usage, performance and outcomes of the RAD after a period of two years from commencement of the DASSA arrangements, with reference to the information contained in the monthly RAD Reports over that year.

The TSOs will submit to the SEM Committee a report containing the findings of that review, with a recommendation to either discontinue the RAD, or to extend the RAD for a period of two years, with evidence to support that recommendation. Where the TSOs are recommending extending the use of the RAD for a further two years they will include their plan and timeline to phase out the RAD.

While the RAD operates under extension as approved by the SEM Committee, the TSOs will continue to review and report to the SEM Committee on the performance of, and recommendations to discontinue/extend, the RAD at least once every two years.

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# System Service Supplier Charge Queries arising from Working Group #6

# Queries arising from 6th Meeting

| No | Action/Query | Response |
|---|---|---|
| 1 | TSOs to confirm with Regulation teams what proportion of TUoS/ SSS charges is made up of DS3 costs. | Approximately 50% of the SSS tariff is made up of DS3 costs (though this proportion varies by year). Approximately 20 - 25% of TUoS (not including the k factor) is made up of DS3 costs. |
| 2 | TSOs to confirm with Regulation teams how long the notice period will be for any charge rate changes. | Suppliers are required to give a minimum of 1 month notice to customers, so we will provide at least that for the annual tariff process. If there are ever any within year adjustments, we will provide as much notice as possible in the circumstances. |
| 3 | TSOs to confirm with Finance teams the processes for 'topping back up' the working capital fund after it has been used before pro-rata payments kick in. | The TSOs are currently undertaking work to determine an appropriate size of working capital facility. When that is determined, we will approach lenders to determine appetite and attempt to put the required facility in place. The size of the facility will also be informed by the TSOs wider borrowing capacity. |
| 4 | TSOs to consider whether forecast costs for charge rates can be provided. | In SEM-25-007, the SEMC has asked the TSOs to produce an estimate of annual costs in the Spring, which will inform both our approach to the transition year of 2026/27 and the first full year of the FASS charge which should be 2027/28. At the moment, we do not see any reason why the TSO tariffs in aggregate should increase as result of the change to FASS, however we are still waiting for SEMC decisions that will feed into our assessment. |
| 5 | TSOs to investigate if pro-rata payments would apply to all sections of FASS i.e. long-term contracts such as LCIS as well as the DASSA. | Pro-rata payments would not be applied to LCIS, since the contractual arrangements are already fixed. The TSOs would envision that the pro-rata payments would be applied to DASSA payments and the non-reserve arrangements payments (noting that the non-reserve design will be subject to industry consultation and SEMC decision). |

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# AOB