

Technical Specification-
Baseline Methodology
Verification Tool
WS1A Product 7

June 2021 | Version 1

DOCUMENT CONTROL

Authorities

Version	Issue Date	Authorisation	Comments
1	11/06/21		

Introduction

About ENA

Energy Networks Association (ENA) represents the owners and operators of licenses for the transmission and/or distribution of energy in the UK and Ireland. Our members control and maintain the critical national infrastructure that delivers these vital services into customers' homes and businesses.

About Open Networks

Britain's energy landscape is changing, and new smart technologies are changing the way we interact with the energy system. Our Open Networks project is transforming the way our energy networks operate. New smart technologies are challenging the traditional way we generate, consume and manage electricity, and the energy networks are making sure that these changes benefit everyone.

ENA's Open Networks Project is key to enabling the delivery of Net Zero by:

- opening local flexibility markets to demand response, renewable energy and new low-carbon technology and removing barriers to participation
- providing opportunities for these flexible resources to connect to our networks faster
- opening data to allow these flexible resources to identify the best locations to invest
- delivering efficiencies between the network companies to plan and operate secure efficient networks

Technical Specification - Baseline Methodology Verification Tool

Key Deliverables

- ▶ Baseline verification tool
- ▶ Baseline methodology verification tool final report
- ▶ Verification tool guidance documentation

Deliverable Specifications

Baseline verification tool

Design and produce a tool to allow UK DNOs and relevant stakeholders the ability to test and verify baseline calculations for participation in the UK Distribution flexibility market.

1. Design
 - a. Support ENA P7 Baseline Methodologies product team in establishing suitable parameters for baseline methodology application. Baselines will be aligned to recommendations from the [2020 Baseline Methodology Assessment report](#), however some parameters are not yet determined.
 - b. Design a tool that will be accessed by multiple user types (UK DNOs, FSPs, platforms and Stakeholders) to verify baselines.
 - c. Include for user configurable parameters to allow for calculation of different products and baseline types.
 - d. Include for Administrator configurable parameters to allow for global change to baselines. I.e. As a result of changes to industry baseline standards.
 - e. Consideration should be given as to the platform through which the tool is accessed and where this will be hosted.
 - f. Consideration should be given as to options for interfacing via DNO and 3rd party Systems. i.e. API
 - g. No requirement to handle user personal data
 - h. Should not store or retain any user metering data after data checks/calculation complete.
2. Build
 - a. Produce a tool that can calculate a baseline for each of the 2020 recommended baseline types.
 - b. Must include a process for checking and flagging missing data with user
 - c. Pre event baseline calculation
 - d. post event baseline verification.

3. Testing & verification
 - a. Minute by minute example data will be provided by DNOs.
 - b. Tool performs as anticipated?
 - c. Baselines perform as anticipated?
 - d. Baselines comparative analysis
 - e. Analysis of baseline test results
 - f. Finalisation of baseline design and tooling.
4. Publish
 - a. Publish publically available final version of tool.

Tool Capabilities

	Historic Baseline	Historic with SDA	Nomination baseline	Zero Baseline	Zero with capacity de-rating factor
User data upload – ability for user to upload metering data through tool GUI	√	√	√	√	√
API Data exchange – ability for user to exchange data with tool via API	√	√	√	√	√
Tool performs data completeness check	√	√	√	√	√
Tool notifies user of incomplete data	√	√	√	√	√
Pre-event calculation of baseline – provides baseline calculation ahead of service delivery.	√	√	Optional		
Post-event verification of baseline – verifies accuracy of baseline post service delivery	√	√	√	√	√
System defined parameters – system imposed parameters for required data volumes and data exclusions.	√	√	√	√	√
System defined parameters – system imposed parameters for data rejection.	√	√	√	√	√

User defined parameters – user is able to select applicable baseline as agreed within Service contract.	√	√	√	√	√
User defined parameters – user is able to select date/date range for which they are seeking a baseline	√	√			
User defined parameters – user is able to select date/date range for which they are seeking a baseline verification.	√	√	√	√	√
User defined parameters – user is able to select applicable de-rating factor as agreed within Service contract.					√
Administrator defined parameters – ability to change system defined parameters	√	√	√	√	√
Calculation result – tool provides a calculation result with value, valid time range, and applicable baseline.	√	√	√	√	√

Baseline methodology verification tool report

Produce a report to document the learning and processes undertaken in the design and implementation of the baseline verification tool.

The report should include:

- Final baseline parameters
- Testing criteria
- Testing analysis
- Testing conclusions
- All associated baseline algorithms

Verification Tool Guidance Document

Produce a practical guidance document to support users of the baseline verification tool.

Stage gates & timeline

Baseline Parameter design	June - July
Tool design	July - Aug
Tool build	July - Sept
Testing and Analysis	Sept - Oct
Tool finalisation	Oct - Nov
Final Report	Nov - Dec
Tool publication	Dec
Guidance publication	Dec

Success Criteria

- Robust analysis of baseline methodologies to justify DNO adoption and implementation.
- Delivery of an accessible, self-serve tool that allows DNOs, FSPs and other relevant stakeholders ability to determine a reliable baseline ahead of a flexibility event.
- Delivery of an accessible, self-serve tool that allows DNOs, FSPs and other relevant stakeholders ability to verify the calculated baseline after a flexibility event.
- Publication of transparent baseline methodologies that can be further developed as the Distribution flexibility market matures.

Other Requirements

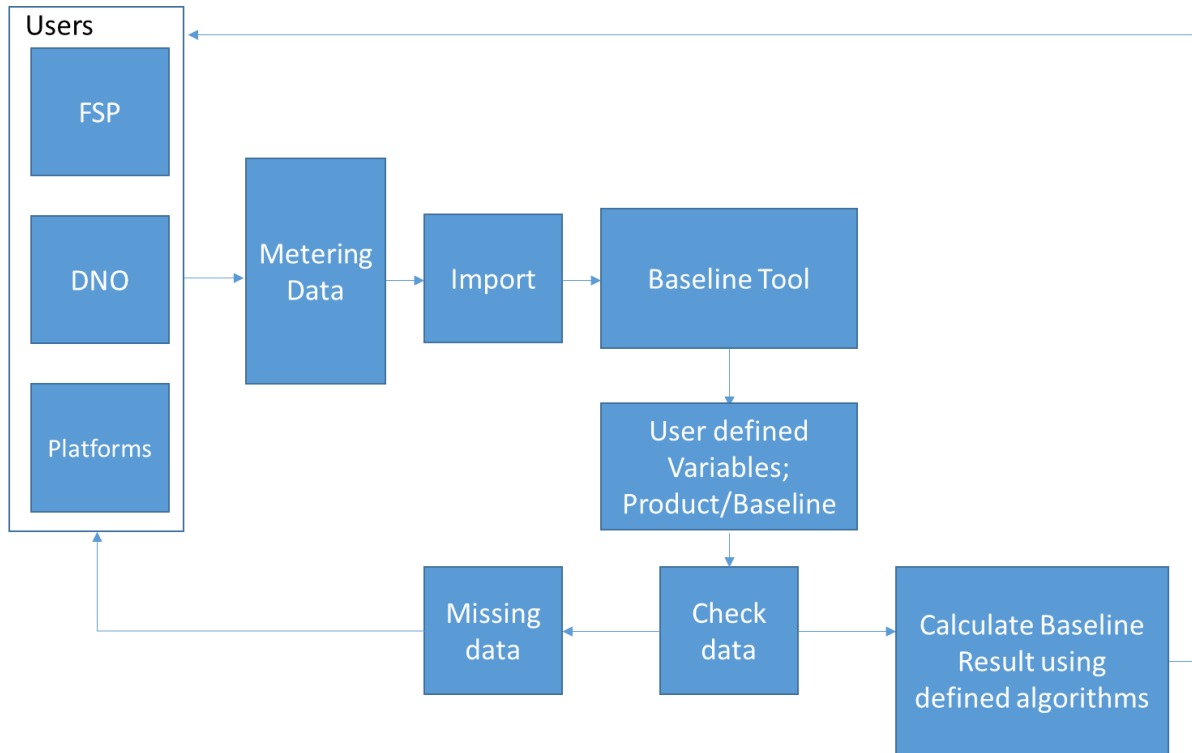
GDPR and Data Protection

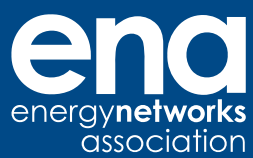
The vendor will need to demonstrate the tools compliance with GDPR and data protection regulations. As referenced in 1e and 1f, the tool must not handle or store personal data nor should it store or retain the metering data that is handled by the tool for the purpose of data checking and baseline calculation.

Ownership & IPR arrangements

Following completion of the works, the ENA will have sole ownership of the tool. All relevant background and foreground IPR will be owned by the ENA.

Baseline Tool – High Level Functional Specification





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