

# DELIVERABLE: D5.3 Guidelines for Implementation of New Contractual Arrangements

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**Building Up Next-Generation Smart Energy Services Offer and Market Up-take Valorising Energy Efficiency and Flexibility at Demand-Side.**

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## List of Acronyms

<b>AI</b>	Artificial Intelligence
<b>AM&amp;V</b>	Automated Measurement and Verification
<b>B2B</b>	Business-To-Business
<b>B2C</b>	Business-To-Client
<b>BESP</b>	Bundled Energy Service Provider
<b>BOSS</b>	BungEES One-Stop-Shop
<b>EED</b>	Energy Efficiency Directive
<b>EES</b>	Energy Efficiency Service
<b>EPBD</b>	Energy performance Building Directive
<b>ESCO</b>	Energy Service Company
<b>ESPC</b>	Energy Service Provider Company
<b>GDPR</b>	General Data Protection Regulation
<b>HoT I</b>	Head of Terms One
<b>HoT II</b>	Head of terms Two
<b>KPI</b>	Key Performance Indicator
<b>M&amp;V</b>	Measurement and Verification
<b>ML</b>	Machine Learning
<b>OSS</b>	One Stop Shop

## Executive summary

Europe's transition to a decarbonised, flexible, and consumer-centric energy system increasingly relies on integrated energy services (combining energy efficiency, renewables, demand flexibility, digital solutions, etc.), yet the large-scale uptake of such bundled services remains limited by non-technical barriers. Experience shows that issues like contractual fragmentation, unclear stakeholder roles, high transaction costs, regulatory complexity, and low consumer trust are now the main obstacles to scaling innovative energy service models. Deliverable D5.3, *Guidelines for Implementation of New Contractual Arrangements*, directly addresses these challenges by focusing on how to deploy new contractual frameworks in real-world markets. Building on the BungEES project's prior work (notably Deliverable D5.2, which defined effective bundled service contracts), D5.3 shifts the emphasis from contract design to **practical implementation**. Its objective is not to propose new contract concepts, but to provide **actionable, policy-aligned guidance** that enables market actors to operationalize the existing two-tier "One-Stop-Shop" (OSS) contractual model efficiently and at scale. Accordingly, the scope centres on the OSS model's dual contract structure – D5.3 focuses primarily on the OSS customer contract (Head of Terms II) as the key interface with end-users, while also addressing the behind-the-scenes partner agreements (Head of Terms I) to ensure end-to-end coherence. The guidelines thus span both business-to-business (B2B) and business-to-client (B2C) dimensions, recognizing that an OSS can succeed only if the entire contractual chain is consistent and trusted.

### *Methodological approach*

D5.3 adopts an implementation-oriented, actor-centred methodology to develop these guidelines. It builds systematically on earlier BungEES deliverables (especially D5.2 and D2.5) and incorporates qualitative insights from stakeholder engagements, pilot preparations, and pilot implementations, ensuring that the guidance is grounded in real-world experience. Rather than treating contracts as static legal documents, the approach views them as *living instruments* that structure interactions among actors, allocate risks and responsibilities, and shape operational behaviour. A key feature of the methodology is translating high-level contractual principles (such as consumer protection, predictable billing, performance transparency, and data governance) into concrete implementation practices. This involves identifying the operational requirements – from customer onboarding processes and digital tools to organizational capabilities and partner coordination mechanisms – needed to uphold those principles in practice. The guidance is designed with cross-country applicability in mind – common principles are abstracted to a general level, while allowing adaptation via modular contract annexes to fit national regulatory and market contexts. This methodological approach ensures the recommendations are both **practical** and **transferable** across different European contexts.

### *Key findings*

The analysis confirms that simply having well-designed contracts on paper is not sufficient to guarantee successful deployment of bundled energy services. Several critical findings emerged regarding what is needed in practice. *First*, there must be a clear separation between the B2B agreements among service partners and the B2C contract with the customer – complexity should be absorbed in the partner-level contract (Head of Terms I), while the

customer-facing OSS contract (Head of Terms II) remains as simple and transparent as possible. *Second*, the OSS provider should serve as a **single point of accountability** for the customer: regardless of how many partners are involved behind the scenes, the end-user should have one contract and one entity responsible for the service. *Third*, implementation gaps often arise at the interfaces between different partners, especially in areas like performance monitoring, billing, data access, and customer support – these interface issues can undermine service delivery if not proactively managed. *Fourth*, building and maintaining **customer trust** is pivotal for success. Trust is influenced not only by the contract terms themselves, but by the quality of customer onboarding, assurances of comfort (e.g. that energy-saving measures won't compromise comfort), transparent billing, and responsive support in resolving issues. *Finally*, national regulatory and market conditions do shape how the OSS model can be implemented in each country, but they do **not** invalidate the OSS concept – if contracts are modular and adaptable. In other words, the two-tier OSS contractual framework remains sound across diverse contexts if it is flexibly adapted to local rules and practices.

### *Lessons from pilot projects*

The BungEES pilots in the Czech Republic, France, Portugal, and Spain provided concrete evidence of how these contractual arrangements perform in practice, yielding several cross-cutting lessons. The pilot experiences highlighted the need for rigorous upfront preparation and clear partner coordination – **early technical and organizational pre-assessments** are necessary to avoid implementation failures at the installation or operational stage, and a **clear allocation of responsibilities** among all partners – backed by back-to-back liability agreements under Head of Terms I – significantly reduces operational risk and protects the OSS's single-customer-interface model. For customer acceptance and trust, two factors proved essential: ensuring **customer comfort and control** (for example, giving end-users the ability to override or opt out of automated controls) and maintaining strong **data governance** (treating GDPR privacy compliance not just as a legal duty but as a core trust-building element). The pilots also showed that **market maturity and incentive availability** in each country strongly influence scalability – where markets are less prepared or supportive incentives are lacking, a progressive, phased deployment strategy is needed to build up success gradually. These lessons validate the relevance of the BungEES contractual framework in real conditions, while underscoring the importance of disciplined implementation practices and robust organizational capabilities to support the contracts. In summary, the OSS model can work across different contexts, but the details of implementation and operational management are what determine its success on the ground.

### *Recommendations*

Based on the analysis and pilot outcomes, Deliverable D5.3 sets out practical recommendations to guide market actors in implementing the OSS contractual model. **Maintaining a standardised contractual core** for both the partner agreement (Head of Terms I) and the customer contract (Head of Terms II) is strongly recommended, with modular annexes to adapt terms to national or local requirements. The contract documents should not remain abstract; D5.3 advises **translating contractual clauses into concrete operational governance measures**, internal procedures, and supporting digital tools, so that the intents of the contract are executed in day-to-day operations. It also recommends **integrating**

**performance monitoring and Automated Measurement & Verification (AM&V)** into both the contract framework and the regular service operations, ensuring that energy savings and performance commitments are transparently tracked and verified in practice. Another key recommendation is to **prioritise predictable, transparent, and consolidated billing** for customers. A single, clear bill that consolidates the various service components improves the customer experience and trust in bundled services. In addition, the guidelines call for **high investment in customer engagement**, including effective communication strategies, streamlined onboarding processes, and responsive support mechanisms, as integral parts of contractual implementation. Finally, D5.3 advocates adopting a **risk-based implementation approach** – this means starting with pilot phases or trial periods, using progressive commitment steps (so that obligations scale up as confidence grows), and planning for contingencies such as partner substitution if needed. Such an approach allows providers to manage uncertainties and build credibility as the new service model scales up.

### *Conclusions and outlook*

Overall, Deliverable D5.3 demonstrates that innovative contractual arrangements – particularly the two-tier OSS contract architecture – are a **cornerstone** of scalable, trustworthy, and consumer-centric energy services, provided they are implemented as living documents aligned with organizational processes, digital infrastructure, and customer interaction practices. By offering structured, implementation-oriented guidance, this deliverable helps to bridge the gap between contractual innovation and real market uptake. It supports energy service providers and their partners in reducing transaction costs, managing complexity, and building customer trust, all while remaining consistent with the broader objectives of EU energy policy. The guidelines and recommendations in D5.3 are closely aligned with EU policy frameworks – such as the Energy Efficiency Directive and the Energy Performance of Buildings Directive – and they aim to move integrated energy services beyond isolated pilot projects toward **widespread deployment**. This will support the decarbonisation of buildings across Europe and help protect citizens against energy price shocks by enabling more resilient, efficient energy services at scale.

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## Acronyms

<b>API</b>	Application Program Interface
<b>B2B</b>	Business to Business
<b>B2C</b>	Business to Client
<b>BESP</b>	Bundled Energy Service Provider
<b>CEE</b>	Council Of European Energy
<b>DR</b>	Demand Response
<b>DSR</b>	Demand Side Response
<b>EED</b>	Energy Efficiency Directive
<b>EES</b>	Energy Efficiency Service
<b>eIDAS</b>	Single Euro Payments Area
<b>EPBD</b>	Energy Performance Directive
<b>EV</b>	Electric Vehicle
<b>ESCO</b>	Energy Service Company
<b>HoT</b>	Head Of Terms
<b>KPI</b>	Key Performance Indicator
<b>MGV</b>	Measurement And Verification
<b>OSS</b>	One-Stop Shop
<b>PV</b>	Photovoltaic Energy
<b>SEPA</b>	Single Euro Payments Area
<b>SLA</b>	Service Level Agreement

## 1. Introduction

### 1.1 Context and rationale

The European energy transition has reached a stage where the availability of technology is no longer the primary limiting factor. High-efficiency equipment, digital building controls, smart meters, distributed generation, storage, and demand-side flexibility solutions are widely available and increasingly becoming cost-effective. Nevertheless, their large-scale deployment across Member-States still remains uneven and insufficient to meet the EU climate neutrality, energy efficiency, and system flexibility objectives. Evidence gathered across the BungEES project confirms that the most persistent barriers are not technical, but structural and organisational. In particular, contractual fragmentation, unclear allocation of roles and risks, limited replicability of agreements, and weaknesses in consumer protection continues to constrain market uptake.

Within this context, the BungEES project addresses the gap between innovative energy service concepts and their effective market implementation. Previous BungEES work has demonstrated that bundling energy efficiency, demand-side flexibility, distributed energy resources, and non-energy services into integrated offers can generate significant value for consumers, service providers, and even for the energy grids. However, it has also shown that without appropriate contractual arrangements, these integrated services struggle to move beyond pilots and early adopters. Market actors frequently report high transaction costs, lengthy negotiations, and legal uncertainty when attempting to deploy bundled services across different customer segments and national contexts.

Deliverable *D5.3 – Guidelines for Implementation of New Contractual Arrangements*, directly responds to these challenges. It builds on Deliverable *D5.2- Effective Contractual Arrangements*, which defined the effective contractual arrangements for innovative and integrated energy services, by focusing on the practical conditions required to operationalise those arrangements. The emphasis is not on proposing new contractual models, but on providing structured, policy-aligned, and technically grounded guidance to support the contracts real-world application by market players of different sizes and levels of maturity.

### 1.2 Policy alignment and relevance

The development of new contractual arrangements for bundled energy services must be understood within the broader European policy framework. The Clean Energy for All Europeans Package, the revised Energy Efficiency Directive (EED), the Electricity Market Directive, and the Energy Performance of Buildings Directive (EPBD) collectively promote a transition from static, asset-based interventions toward continuous, performance-oriented energy services. These instruments explicitly recognise active consumers or prosumers, independent aggregators, citizen and renewable energy communities, and demand-side flexibility as essential elements of a cost-efficient and resilient energy system. Moreover, year's Affordable Energy Action Plan reinforces this direction by making affordability and resilience to future price fluctuations key priorities and highlighting the role of energy efficiency and consumer solutions in reducing bills.

While EU legislation establishes rights, obligations, and high-level market principles, it does not prescribe how integrated services should be contracted in practice. As a result, implementation is left to market actors operating under heterogeneous national legal, regulatory, and commercial conditions. This creates a risk of fragmentation, where similar services are delivered through incompatible contractual structures, increasing costs and undermining scalability. The BungEES contractual framework, presented in Deliverable D5.2, addresses this risk by proposing a standardised, yet adaptable architecture based on two complementary instruments: **The Bundled Energy Service Master Agreement (Head of Terms I- HoTI<sup>1</sup>)** governing business-to-business relationships, and the **One-Stop-Shop (OSS) Customer Contract (Head of Terms II - HoTI<sup>2</sup>)** governing business-to-consumer relationships.

This report (Deliverable D5.3) supports these policy objectives, by translating high-level regulatory principles such as consumer protection, transparency, non-discrimination, and proportionality into concrete implementation guidance. By doing so, it supports Member-States objectives under the EED and EPBD, particularly those related to the promotion of energy services, performance contracting, and the reduction of non-technical barriers to energy efficiency and flexibility investments.

### 1.3 From contractual design to implementation

Deliverable D5.2 established the conceptual foundations of the BungEES contractual framework. It identified the need for a two-tier structure capable of supporting multiple collaboration models between service providers while offering end customers a single, coherent contractual interface. It also highlighted key design principles, including clarity of scope, balanced risk allocation, data governance, and compliance with EU consumer protection rules.

However, experience from both BungEES pilots and wider market practice shows that well-designed contracts alone are not sufficient. Their effectiveness depends on how they are implemented, operationalised, and embedded within organisational processes. Implementation challenges frequently arise around issues such as partner coordination, performance monitoring, billing predictability, customer communication, and adaptation to national regulatory constraints. Without clear guidance, market actors risk deviating from the intended contractual logic, re-introducing complexity and undermining trust among partners and customers.

This deliverable therefore focuses on the “how” rather than the “what” of contractual arrangements. It provides guidance on how the BungEES Heads of Terms can be deployed in practice, how different implementation models (lead-generation, partnership, and service-provider models) can be selected and managed, and how contractual principles can be translated into day-to-day operational procedures. Particular attention is given to ensuring

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<sup>1</sup> See Annex A2

<sup>2</sup> See Annex A3

continuity of service, safeguarding consumer rights, and enabling replication across territories without renegotiating core contractual elements.

#### 1.4 Scope and objectives of the guidelines

The scope of D5.3 is more centred on the One-Stop-Shop (OSS) Customer Contract (Head of Terms II - HoTII<sup>3</sup>) because this is the type of contract that needs to be supported to increase its market penetration. Additionally, since the Bundled Energy Service Master Agreement (Head of Terms I - HoT I) is established between service providers (companies) it is easier to implement. Due to this, D5.3 is more focused on covering the implementation of contractual arrangements for integrated, flexibility-based energy services delivered through a One-Stop-Shop model. It addresses both business-to-business (B2B) and business-to-consumer (B2C) dimensions, recognising that successful OSS deployment depends on the coherence of the entire contractual chain.

On the B2B side, the guidelines focus on how partners can collaborate effectively under the Bundled Energy Service Master Agreement (HoT I), including the allocation of responsibilities, revenue-sharing mechanisms, performance requirements, and exit or substitution arrangements. On the B2C side, they address how the OSS Customer Contract (HoTII) can be implemented in a way that ensures consumer protection and trust, as well as billing predictability, service quality, and compliance with applicable legislation while remaining understandable and acceptable to end-users.

The main objectives of this deliverable are to:

- Support the practical deployment of the BungEES contractual framework by providing clear and actionable implementation guidance;
- Reduce transaction costs and legal uncertainty for market actors wishing to offer bundled energy services;
- Facilitate replication and scaling of OSS models across different Member-States and customer segments;
- Ensure that implementation practices remain aligned with EU policy objectives and consumer protection requirements;
- Capture and disseminate lessons learned from BungEES pilot activities to inform future deployments.

#### 1.5 Target Audience and Usability

This report is primarily addressed to market actors involved in the design, delivery, and operation of smart energy services. This includes energy service companies, aggregators,

utilities, retailers, technology providers, and One-Stop-Shop operators seeking to implement bundled offerings. It is also relevant for facilitators, public authorities, and programme managers involved in supporting energy efficiency programmes, OSS initiatives or overseeing compliance with policy objectives.

The guidelines presented are designed to be usable by organisations with different levels of contractual and legal expertise. These guidelines do not assume extensive in-house legal capacity/expertise, nor do they prescribe a single mandatory implementation pathway. Instead, the guidelines provide a structured reference framework that can be adapted to local conditions while preserving the integrity of the BungEES contractual logic. Terminology used throughout this report is consistent with the one adopted in Deliverable D5.2, including key concepts such as One-Stop-Shop (OSS), Bundled Energy Service Provider (BESP), Head of Terms (HoT), and performance-based service delivery.

## 1.6 Structure of the report

Following this introduction (chapter 1), the report will have the following structure:

- Chapter 2 describes the methodology used to develop the implementation guidelines, including inputs from earlier BungEES deliverables, stakeholder engagement (done during the development of D5.2 but already having D5.3 in mind) and pilot activities;
- Chapter 3 presents the implementation guidelines for One-Stop-Shop contracts, detailing key steps, roles, and organisational requirements;
- Chapter 4 outlines the main implementation requirements, including tools and resources needed for effective OSS operation;
- Chapter 5 analyses market barriers and real-world constraints encountered during implementation;
- Chapter 6 consolidates lessons learned from the BungEES pilots conducted in different Member States;
- Finally, chapter 7 presents recommendations and conclusions aimed at supporting wider replication and long-term market uptake of new contractual arrangements for integrated energy services.

By providing policy-aligned, technically robust, and practice-oriented guidance, this deliverable seeks to support the transition from isolated demonstrations to scalable, trustworthy, and consumer-centric energy service markets across the European Union.

## 2. Methodology

### 2.1 Methodological Basis and Overall Approach

The methodology adopted for Deliverable D5.3 has been designed to ensure continuity, coherence, and cumulative learning within the BungEES project, while responding to the specific objective of this deliverable, which is to provide practical guidance for the implementation of new contractual arrangements for integrated, flexibility-based energy services.

Unlike previous deliverables that focused on conceptual design, market analysis, or contractual structuring, D5.3 adopts an explicitly implementation-oriented perspective. The used methodological approach therefore does not seek to redefine contractual models, business concepts, or service packages already developed under BungEES. Instead, it builds systematically on validated project outputs, in particular Deliverable D5.2 (Effective Contractual Arrangements for Innovative and Integrated Energy Services) and Deliverable D2.5 (Integrated Smart Energy Efficiency Service Package Concept and Detailed Service Model) where market roles are well-defined. Therefore, translation of all this into operational guidance that can be applied by market actors in real-world contexts.

To achieve this objective, the methodology combines analytical, qualitative, and synthetic elements. It integrates evidence from previous work packages and deliverables (e.g. namely the extensive work done in data collection for D5.2), as well as insights from stakeholder engagement, pilot preparation activities and an analysis of service delivery across the value chain. The result is a structured methodology that bridges the gap between contractual design and real-world implementation, while remaining aligned with EU policy objectives and market realities.

### 2.2 Integration Of BungEES Work Packages and Deliverables

A central methodological principle of deliverable D5.3 is the systematic reuse and consolidation of results generated in earlier BungEES deliverables. This ensures internal consistency across the project and avoids duplication of analysis. Deliverable D5.2 constitutes the primary reference for the contractual content of this report.

It established the two-tier contractual architecture underpinning the BungEES model, namely:

- ✓ the **Bundled Energy Service Master Agreement (Head of Terms I)** governing relationships between professional partners;
- and
- ✓ the **OSS Customer Contract (Head of Terms II)** governing the relationship between the Bundled Energy Service Provider (BESP) and the end customer.

The methodology of D5.3 starts by considering that these contractual structures are well-defined and fitted for purpose. The focus is therefore on understanding how these contractual arrangements can be implemented effectively, rather than on reassessing their legal or conceptual foundations. Specific attention is paid to identifying which elements of the contracts have critical implications in implementation, such as performance monitoring, revenue sharing, customer communication, data governance, and exit or substitution mechanisms.

In parallel, Deliverable D2.5 provides the methodological foundation for understanding the service logic and market ecosystem in which these contracts are deployed. In particular, Chapter 4 of D2.5 offers a detailed analysis of market actors, their roles, and their interactions within Smart Energy Efficiency Service (Smart EES) models. D5.3 explicitly builds on this actor mapping to ensure that implementation guidelines reflect realistic organisational configurations and value-chain structures.

Other WP2 deliverables, including those addressing service packages, value propositions, revenue streams, and non-energy benefits, are used as contextual inputs. While these aspects are not the main subject of D5.3, they inform key implementation considerations, such as incentive alignment, customer segmentation, and communication strategies.

### 2.3 Actor-centred Methodological Perspective

Implementation of new contractual arrangements is inherently a multi-actor process. For this reason, the methodology adopted in D5.3 is explicitly actor-centred. Contracts are not analysed as an isolated issue, but as instruments that structure interactions between actors with different roles, incentives, capabilities, and constraints.

Building on D2.5, the methodology identifies a set of core actor roles that are typically involved in the delivery of bundled energy services through an OSS model. These actors include (as presented in the figure below), but are not limited to:

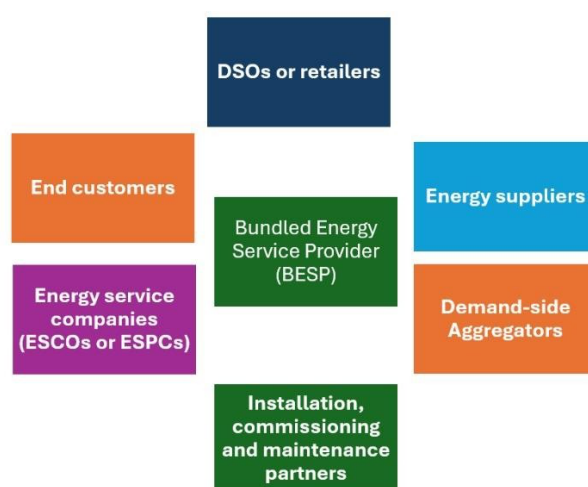


Figure 1 - Core actor roles that are typically involved in the delivery of bundled energy services through an OSS model

- ✓ The **Bundled Energy Service Provider (BESP)** acting as the OSS interface;
- ✓ **Energy service companies (ESCOs or ESPCs)** providing efficiency measures and performance-based services;
- ✓ **Demand-side flexibility or demand response aggregators;**
- ✓ **Technology providers** supplying hardware, software, and digital platforms;
- ✓ **Installation, commissioning and maintenance partners;**
- ✓ **Energy suppliers, DSOs or retailers** (when relevant);
- ✓ **End customers**, including households, SMEs, and public or tertiary-sector organisations.

The methodology recognises that these roles may be combined within a single organisation or distributed across multiple entities, depending on national context and business strategy. Rather than prescribing a fixed organisational model, the methodological approach focuses on identifying interaction patterns, dependencies, and potential friction points between actors.

This actor-centred analysis is applied across the three collaboration models identified in D5.2 (lead-generation, partnership, and service-provider models). By comparing these models, the methodology identifies both common implementation requirements and model-specific challenges, ensuring that the resulting guidelines remain applicable across different business approaches.

#### 2.4 Analysis Of Interactions, Responsibilities And Risk Allocation

A key methodological step consists of analysing how responsibilities, risks, and incentives are distributed across the service delivery chain. Drawing on D2.5 and D5.2, the methodology examines interactions between actors in terms of:

- ❖ Contractual responsibilities and service scope;
- ❖ Data flows and information exchange;
- ❖ Financial flows and revenue allocation;
- ❖ Operational dependencies and coordination needs;
- ❖ Exposure to technical, regulatory, and market risks.

This analysis allows the identification of implementation-critical interfaces, where contractual provisions must be supported by appropriate organisational procedures and tools. Examples

include coordination between installers and digital platform providers, alignment between performance guarantees and Measurement and Verification (M&V) practices (especially automated M&V), and consistency between customer-facing communication and backend contractual arrangements between partners.

By explicitly linking contractual clauses to operational realities, the methodology avoids treating implementation as a purely administrative step. Instead, it highlights the need for integrated organisational design, where contracts, processes, and technical systems are mutually reinforcing.

## 2.5 Use of Stakeholder Insights and Pilot Experience

Although D5.3 does not introduce new large-scale data collection activities, as this was performed in D5.2, its methodology makes extensive use of qualitative insights gathered during the development of D5.2 and earlier BungEES tasks and surveys. This previous data collection was organized looking ahead so that the gathered data had already specific data inputs needs for D5.3. These insights were originate from interviews, internal workshops, questionnaires, surveys, bilateral meetings with relevant stakeholders and continuous exchanges among consortium partners, many of whom are directly involved in the deployment of energy services.

The methodological approach involved synthesising these insights with a specific focus on implementation challenges and enabling factors. Recurring themes identified across stakeholder inputs included:

- Difficulties in communicating bundled offers to customers in a clear and credible manner;
- Challenges in aligning contractual commitments with operational capabilities, particularly in early deployment phases;
- The importance of flexibility during pilots and market entry;
- The need for clear procedures to manage underperformance or partner replacement.

Pilot preparation and early pilot experience provided an additional layer of validation. While detailed lessons learnt from pilots are presented in chapter 6, the methodology uses pilot feedback to test the practical feasibility of contractual assumptions made in D5.2. This includes assessing whether contractual provisions related to performance monitoring, customer consent, or service continuity can be realistically implemented under national regulatory and market conditions. This pilot experience and lessons learnt was harmonized into a single questionnaire filled in the BungEES pilot responsible for the pilot at his home country. This template is presented in the Annex A1.

## 2.6 Moving From Contractual Principles Into Implementation Guidance

Deliverable D5.2 identified several guiding principles for effective contractual arrangements, including consumer protection, billing predictability, service quality, transparency, and balanced risk allocation. A central methodological task of D5.3 is to move from these high-level principles into concrete implementation guidance.

This move or translation is achieved by decomposing each principle into operational dimensions. For example:

- **Consumer protection** is analysed in relation to onboarding procedures, information disclosure, consent management, and complaint handling;
- **Billing predictability** is linked to pricing structures, data quality, and coordination between partners responsible for the different service components;
- **Service quality** is examined through performance monitoring, service-level agreements, and escalation procedures.

By breaking down abstract principles into actionable elements, the methodology enables the formulation of guidelines that can be implemented through organisational processes, internal rules, and supporting tools. This step also highlights potential trade-offs between principles, such as the balance between standardisation and flexibility, which are addressed through modular contractual and organisational designs.

## 2.7 Cross-country Abstraction and Transferability

Given the diversity of regulatory, legal, and market conditions across EU Member-States, a key methodological challenge is to ensure that the guidelines developed within this report are transferable beyond specific national contexts. To address this, the methodology adopts a cross-country abstraction approach.

Rather than documenting country-specific implementation processes, the methodology focuses on identifying patterns and constraints that recur across different contexts. National regulatory differences are treated as boundary conditions that shape implementation choices, but do not alter the fundamental logic of OSS deployment.

As a result, the methodology distinguishes between:

- **Core implementation elements:** Expected to be applied across all Member-States;
- and
- **Context-dependent elements:** Require adaptation to national legal, regulatory, or market conditions.

This distinction allows D5.3 to provide guidance that is both sufficiently general to support replication and flexible to accommodate local specificities.

## 2.8 Methodological Limitations

Finally, it is important to acknowledge the limitations of the adopted methodology. The guidelines presented in this deliverable are based on a finite number of pilots and stakeholder inputs, and they primarily reflect the perspectives of actors (identified in D2.5) already engaged in innovative energy services. Market conditions, regulatory frameworks, and technologies are in permanent evolution, and future developments may require adjustments to the proposed guidance.

Although, by grounding the methodology in validated BungEES deliverables, real-world experience, and an explicit actor-centred analysis, D5.3 provides a robust and transparent methodological foundation for the implementation guidelines presented in the following chapters. However, since the energy sector is in a continuous evolution process this methodology may need to be revisited and updated from time to time.

## 3. Implementation Guidelines for One-Stop-Shop Contracts

### 3.1 Purpose and Positioning of the Implementation Guidelines

This chapter provides detailed implementation guidelines for One-Stop-Shop (OSS) contracts, building directly on the contractual framework developed in BungEES Deliverable D5.2 and in the analytical foundations presented in the previous chapters of this report. While D5.2 defined the structure, scope, and legal logic of effective contractual arrangements for bundled and integrated energy services, experience from both BungEES pilots and wider market practice demonstrates that contractual soundness alone is not sufficient to ensure successful deployment. The effectiveness of OSS contracts ultimately depends on how they are operationalised, embedded into organisational processes, and adapted to real-world market conditions.

The purpose of this chapter is therefore to bridge the gap between contractual design and market deployment. It focuses on the practical steps, organisational arrangements, and operational practices required to implement OSS contracts in a way that is scalable, trustworthy, and resilient to the non-technical barriers identified in D5.2. These non-technical barriers include behavioural barriers such as lack of consumer trust, legal and regulatory uncertainty, financial and accounting constraints, organisational fragmentation, and data-related risks.

The presented guidelines are structured to support the implementation of the two-tier contractual architecture (above mentioned) underpinning the BungEES model, Bundled Energy Service Master Agreement (Head of Terms I – HoT I), which governs collaboration among professional partners involved in delivering bundled services; and the OSS Customer Contract (Head of Terms II – HoT II), which governs the relationship between the Bundled Energy Service Provider (BESP) and the end customer.

Special emphasis is placed on implementation practices that help to mitigate the risks identified for both contractual layers. While HoT I risks often materialise as coordination failures or disputes between partners, HoT II risks typically affect customer trust, service uptake, and long-term retention. The chapter therefore treats implementation as an end-to-end process, covering the entire contractual chain rather than isolated agreements.

### 3.2 Structuring OSS Implementation Around Clear Roles and Accountability

A recurring barrier identified in D5.2 is the lack of clarity regarding roles, responsibilities, and accountability when multiple actors collaborate to deliver bundled energy services. In practice, this lack of clarity often results in duplicated efforts, gaps in service delivery, or disputes when performance issues arise. From the customer perspective, it may also lead to

confusion about who is responsible for solving his problems, thereby undermining trust in the OSS model.

Effective OSS implementation should therefore be structured around explicit and operationally enforced role definitions. The following guidelines are then recommended:

- **Single point of accountability towards the customer** - Regardless of the number of partners involved in delivering the service, the customer must interact with a single contractual counterparty, namely the BESP. This principle must be reflected not only in the OSS Customer Contract, but also in internal governance and customer support procedures. From an implementation perspective, this requires that the BESP establishes back-to-back obligations with all partners under HoT I, ensuring that customer-facing commitments can be enforced throughout the value chain;
- **Detailed role and responsibility mapping** - Before contract signature and service deployment, OSS operators should develop a comprehensive role and responsibility matrix. This matrix should cover all phases of the service lifecycle, including customer acquisition, site assessment, installation, commissioning, operation, maintenance, billing, performance monitoring, data management, and after-sales customer support. The matrix should be annexed to HoT I and used as a reference document for operational teams;
- **Clear escalation and decision-making pathways** - Implementation guidelines should define who has decision-making authority in case of deviations, such as installation delays, equipment failures, or underperformance relative to contractual KPIs. Escalation procedures should be clearly documented and communicated to all partners, reducing the risk of informal renegotiation or blame-shifting under pressure.

By translating contractual role definitions into operational governance structures, OSS operators can significantly reduce organisational and procedural barriers, one of the key non-technical obstacles identified in D5.2.

### 3.3 Managing Customer Onboarding and Trust Levels

Behavioural and consumer-related barriers were identified in deliverable D5.2 as the most persistent obstacles to the uptake of integrated energy services. Customers often perceive bundled offers as complex, unfamiliar, or risky, particularly when they involve digital control, data sharing, or performance-based remuneration. Effective OSS implementation must therefore place strong emphasis on customer onboarding processes that operationalise transparency, simplicity, and fairness. For this the recommended guidelines are:

- **Standardised pre-contractual information** - OSS operators should develop concise and standardised information materials that explain the service offer in simple language. These materials should cover the scope of services, expected benefits, pricing structure, contract duration, exit conditions, and data usage. Consistency

between these materials and the OSS Customer Contract is critical to avoid misunderstandings and potential disputes.

- **Progressive commitment and trial mechanisms** - When feasible, implementation should include pilot phases, trial periods, or limited initial commitments. This reduces perceived risk for customers and lowers the psychological barrier to entry. Operationally, this requires OSS operators to design onboarding processes that remain cost-effective even for short-term contracts, for example through digital onboarding and standardised workflows;
- **Explicit consent and preference management** - Customer consent for data access, device control, and participation in demand response or flexibility services should be captured through structured and auditable processes. Preference settings (e.g. comfort thresholds, etc.) should be easily accessible and modifiable by customers. This not only supports GDPR compliance but also reinforces customer trust and, engagement and sense of control;
- **Accessible customer support and communication** - Implementation guidelines should ensure that customers have access to clear communication channels for questions, complaints, or exit requests. Customer-facing staff must be well-trained to explain complex services in simple terms and to handle concerns consistently.

Trust is built through repeated interactions rather than contract wording alone. OSS operators should therefore align internal performance indicators with customer satisfaction, retention, and complaint resolution metrics.

### 3.4 Translating Performance Commitments Into Operational Monitoring

Performance risk lies at the core of bundled energy services. D5.2 identified performance uncertainty and disputes over measurement and verification as major contractual risks. In implementation, these risks are mitigated by ensuring that performance commitments are realistic, measurable, and supported by robust automated monitoring processes.

Alignment between service design and Automated Measurement and Verification (AM&V) is crucial. Before finalising service offers, OSS operators should verify that all promised performance indicators can be measured and verified with available data and tools. This is particularly critical for AM&V and flexibility services, where data availability and quality directly affect contractual compliance. For this the following guidelines are recommended:

- **Operational KPIs linked to contractual KPIs** - Internal operational metrics such as data completeness, device availability, response time, and fault resolution rates should be explicitly linked to contractual KPIs. This allows early detection of issues and corrective action before contractual thresholds are breached;

- **Regular and structured performance reviews** - Implementation of HoT I should include scheduled performance review meetings between partners, supported by standardised dashboards and reports. These reviews provide a forum for addressing issues collaboratively and adjusting operational practices when needed;
- **Defined problem-solving and adjustment (fine tuning) mechanisms** - OSS operators should implement clear procedures for addressing underperformance issues, including corrective action plans, grace periods, and, when necessary, contract adaptation. Transparent problem-solving pathways reduce uncertainty and the likelihood of disputes escalating into contractual termination.

By embedding performance management into everyday operations (continuous commissioning), OSS operators enhance service reliability and support the bankability of bundled energy services.

### 3.5 Coordinating Multi-partner Delivery under HoT I

Organisational fragmentation and poor coordination between partners was identified in D5.2 as a significant potential implementation risk. Even well-drafted HoT I agreements can fail if not supported by practical robust coordination mechanisms. For this the following guidelines are recommended:

- **Structured partner onboarding** - New partners should undergo a formal onboarding process covering technical integration requirements, data standards, service quality expectations, and customer interaction rules. This onboarding procedure is very similar to a qualification scheme that many DSOs already use to certify their supply chain members. This reduces variability in service delivery and accelerates operational readiness;
- **Shared planning and scheduling tools** - Installation, commissioning, and maintenance activities should be coordinated through shared planning tools accessible to all relevant partners. This helps avoid delays, duplicated visits, and inconsistent customer communication;
- **Service continuity and substitution planning** - OSS operators should maintain contingency plans for partner replacement, including pre-qualified alternative providers. This operational readiness ensures continuity of service in case of partner failure or exit, which is a risk explicitly identified in D5.2;
- **Transparent revenue allocation processes** - Implementation guidelines should define how revenues from different streams are calculated, reconciled, and distributed among partners. Automating these processes where possible reduces administrative burden and the risk of disputes.

Effective coordination transforms HoT I from a static contractual instrument into a dynamic operational framework supporting long-term collaboration.

### 3.6 Implementing Predictable and Transparent Billing

Billing complexity and the difficulty of forecasting future savings or the variable price components was also mentioned in the contractual arrangements deliverable (D5.2) as major barriers to customer acceptance of bundled services. Considering this, the implementation must therefore prioritise billing practices that are simple, transparent, and reliable, as presented in the recommended guidelines below:

- **Single consolidated billing interface** – OSS operators should provide customers with a single bill covering all bundled services. Internally, this requires robust reconciliation mechanisms between partners and clear allocation of billing responsibilities;
- **Stable pricing structures** - Implementation should favour pricing models with a predictable fixed component, complemented by transparent variable or performance-based elements. This reduces perceived financial risk for customers and improves acceptance. The pricing structure should be clearly explained in the invoices to increase customer engagement and trust;
- **Clear explanations and visualisation of benefits** - Bills should be accompanied by simple explanations of charges and achieved benefits, particularly if flexibility rewards or savings-sharing mechanisms are involved. Visual tools (e.g. charts, etc.) can help customers to better understand the value delivered and benefits they are receiving;
- **Efficient and clear dispute resolution procedures** - OSS operators should implement clear procedures for handling billing disputes, including defined response times and escalation paths. Quick and fair resolution of billing issues is critical for client retention and for maintaining customer trust.

### 3.7 Data Governance and Digital Integration in Practice

Data-related barriers, including access, interoperability, and privacy concerns, were also identified in D5.2 as cross-cutting risks affecting both B2B and B2C contracts. Effective implementation requires treating data governance as a core operational function. The following guidelines are recommended:

- **Clear data mapping and ownership documentation** - OSS operators should maintain up-to-date documentation identifying data sources, ownership, access rights, and usage purposes for each service component. This supports compliance and internal clarity;

- **Use of standardised interfaces and protocols** - Wherever possible, implementation should rely on standard APIs and data formats to reduce integration costs and avoid specific vendor dependency (lock-in). This also facilitates partner replacement if necessary;
- **Continuous data quality monitoring** - Operational procedures should include regular checks on data quality, completeness, accuracy, and timeliness. Clear responses to data failures should be defined, including fallback procedures where necessary;
- **Cybersecurity and incident management** - Partners should comply with agreed cybersecurity standards, and OSS operators should maintain tested incident response procedures. Cybersecurity incidents can rapidly erode trust and disrupt service delivery.

### 3.8 Managing regulatory and national-specific constraints

Legal and regulatory frameworks for energy services vary across Member-States, creating implementation challenges for scalable OSS models. However, these challenges can be managed through structured implementation practices, the recommended guidelines for a success implementation are:

- **Modular contractual architecture** - National-specific requirements should be addressed through contract annexes rather than changes to core contractual terms. This preserves standardisation while ensuring compliance;
- **Ongoing regulatory monitoring** - OSS operators should assign responsibility for monitoring regulatory developments affecting energy services, data access, and consumer protection. This function should be integrated into risk management procedures;
- **Targeted pre-deployment legal checks** - Before entering new markets, OSS operators should conduct focused and well-targeted legal assessments addressing consumer law, energy regulation, and data protection, rather than full contract redesign.

### 3.9 Adopting a risk-based approach to OSS implementation

Given the diversity of risks identified in D5.2, OSS implementation should be guided by a structured risk-based approach. This involves identifying key risks at each stage of implementation, assigning ownership for mitigation actions, and reviewing risks periodically.

Common mitigation measures include pilot phases, performance thresholds triggering review, contractual review points, and diversification of partners and revenue streams. By proactively managing risk, OSS operators increase resilience and investor confidence.

### 3.10 Summary of Implementation Guidelines for Contractual Arrangements

By translating contractual principles into concrete operational practices, the implementation guidelines presented in this chapter and summarized in the table below, reduce transaction costs, enhance trust among stakeholders, and improve the replicability of OSS models.

<b>Guidelines for the Successful Implementation of One-Stop-Shop Contracts</b>
<b>Single point of accountability towards the customer</b>
<b>Detailed role and responsibility mapping</b>
<b>Clear escalation and decision-making pathways</b>
<b>Standardised pre-contractual information</b>
<b>Progressive commitment and trial mechanisms</b>
<b>Explicit consent and preference management</b>
<b>Accessible customer support and communication</b>
<b>Operational KPIs linked to contractual KPIs</b>
<b>Regular and structured performance reviews</b>
<b>Defined problem-solving and adjustment (fine tuning) mechanisms</b>
<b>Structured partner onboarding</b>
<b>Shared planning and scheduling tools</b>
<b>Service continuity and substitution planning</b>
<b>Transparent revenue allocation processes</b>
<b>Single consolidated billing interface</b>
<b>Stable pricing structures</b>
<b>Clear explanations and visualisation of benefits</b>
<b>Efficient and clear dispute resolution procedures</b>
<b>Clear data mapping and ownership documentation</b>

<b>Continuous data quality monitoring</b>
<b>Cybersecurity and incident management</b>
<b>Modular contractual architecture</b>
<b>Ongoing regulatory monitoring</b>
<b>Targeted pre-deployment legal checks</b>
<b>Clear identification of risks, mitigation role responsibilities</b>

When applied consistently, these guidelines enable bundling of energy services to move beyond pilots and early adopters/enthusiasts towards scalable, market-ready solutions aligned with EU policy objectives and consumer expectations.

Considering all this, the implementation phase is not a secondary step following contractual design, but a core determinant of success. The guidelines provided here are intended to support market actors in transforming innovative contractual arrangements into durable, trusted, and effective energy services across the European Union.

## 4. One-Stop-Shop implementation requirements

### 4.1 Key Steps, Roles and Actors Involved in One-Stop-Shop Implementation Process

The BungEES OSS model relies on a clear separation between service orchestration and service execution, while presenting a single contractual and operational interface to the end customer. Successful implementation therefore depends on clearly defined roles across the value chain and on a structured implementation process that aligns contractual obligations with operational reality.

#### 4.1.1 Key Roles and Responsibilities in One-Stop-Shop process

At the centre of the OSS model is the Bundled Energy Service Provider (BESP). The BESP acts as the single point of contact for the customer and is the entity contractually responsible for the delivery of the bundled service package under the OSS Customer Contract (HoT II). From an implementation perspective, this role requires the BESP to:

- Coordinate all participating service providers under the Bundled Energy Service Master Agreement (according to HoT I);
- Ensure that the integrated service offer is coherent, understandable, and compliant with consumer protection rules;
- Manage customer onboarding, billing, communication, and complaint handling, as well as after-sales (support during operation);
- Guarantee continuity of service, even when individual partners or subcontractors change.

The BESP does not necessarily deliver all services directly. Instead, it orchestrates a network of specialised actors identified in BungEES Deliverable D2.5, which includes:

- Energy Service Companies (ESCOs), responsible for energy efficiency measures, audits, and performance-based interventions;
- Demand Response or flexibility aggregators, responsible for activating and monetising demand-side flexibility in compliance with market rules;
- Technology providers, supplying equipment, control devices, platforms and data interfaces;

- Installers and maintenance partners, responsible for onsite works and long-term operability;
- Energy suppliers or retailers, where relevant, interacting with billing systems and customer energy supply arrangements.

Clear allocation of responsibilities among these actors is essential. HoT I (see Annex A2) provides the contractual backbone for this allocation, but implementation requires that roles are also reflected in operational procedures, internal workflows, and communication protocols.

#### 4.1.2 Implementation Models and Characteristics

As identified in Deliverable D5.2, the BungEES contractual framework supports several implementation models that allow One-Stop-Shops (OSS) to adapt bundled energy service delivery to different market conditions, organisational capacities, and regulatory environments. These models are not mutually exclusive and may coexist within the same organisation or evolve over time as the OSS gains experience and market maturity. Each model has distinct implementation characteristics that affect governance, risk allocation, and operational complexity.

- **Lead-generation Models** – A lead generator is recruited to collect prospects. The OSS still handles the initial engagement, and the actual delivery of bundled services. From the implementation perspective, this model does not require deep technical integration but places strong emphasis on coordination and information exchange. The OSS must establish clear procedures for transferring customer leads, managing consent for data sharing, and tracking conversion rates from lead to active customer. This model is particularly suited to early market entry or pilot phases, as it allows the OSS to test and refine customer acquisition channels without fully implementing them internally. The main risks associated with implementation are at an early stage: inconsistent messaging, insufficient qualification or poor consent management can increase acquisition costs and undermine trust.
- **Partnership Models** – In this model, two or more actors jointly design, market, and deliver the bundle of services under a shared OSS approach. Implementation under this model is characterised by higher levels of integration and shared governance. Partners typically co-invest in customer acquisition, digital platforms, and service development, and may share revenues and risks according to agreed formulas. From an operational point of view, partnership models require clearly defined governance structures, including joint decision-making mechanisms, shared KPIs, and

regular coordination forums. The Bundled Energy Service Master Agreement (HoT I) is essential to clarify roles, revenue sharing, data ownership, and dispute resolution procedures. Partnership models are well-suited to more mature markets or complex bundle of services, where complementary capabilities are required. However, they also introduce higher coordination costs and require strong alignment of strategic objectives. Without clear operational rules, partnerships risk fragmentation or duplication of effort, which can undermine the OSS's value proposition.

- **Service-provider Models** - In this model, the OSS assumes full responsibility for service delivery towards the customer, and for all technical activities made by subcontracted companies or other implementation partners. This model offers the highest degree of control over customer experience and branding, as the OSS remains the sole contractual counterpart under the OSS Customer Contract (HoT II). Implementation under this model requires robust internal capabilities for subcontractor management, performance monitoring, and service continuity. The OSS must ensure that subcontractors comply with contractual obligations, quality standards, and data protection requirements. Substitution and step-in clauses defined under HoT I become particularly important, as they allow the OSS to replace underperforming partners without disrupting service delivery. Although this model involves higher operational responsibility and financial exposure, it is well suited to scaling up mature service offerings and ensuring consistent customer experience across markets. It also facilitates replication, as the OSS can standardise processes and interfaces while adapting subcontracting arrangements to local contexts.

Selecting the appropriate implementation model is an early and strategic decision that should be based on market maturity, regulatory context, customer segment, and organisational capacity. The developed contractual arrangements (HoT I and II) are designed to allow transitions between models over time, as long as customer rights and service continuity are preserved. This contract flexibility enables OSS operators to start with lower-risk configurations and progressively move towards more integrated models as experience and market confidence increases.

#### 4.1.3 Step-by-Step OSS Implementation Process

From an operational perspective, the OSS implementation can be structured using the following six steps:

1. **Service Definition and Bundling** –The OSS translates the Smart Energy Efficiency Service (Smart EES) packages defined in BungEES Deliverable D2.5 into concrete, market-ready offers. This involves defining the technical scope of each service bundle, identifying which components are mandatory or optional, and clarifying performance commitments. Pricing logic must also be established, including fixed fees, variable components, and any performance-based remuneration. It is crucial that service

definition should already reflect contractual constraints, ensuring that proposed offers can be consistently supported by the OSS Customer Contract (HoT II) without introducing excessive complexity for end users;

2. **Partner Selection and Contracting** – Once the service bundles are defined, the OSS identifies and formalises collaboration with the necessary partners under the Bundled Energy Service Master Agreement (HoT I). This includes ESCOs, aggregators, technology providers, installers, and other implementation partners. From an implementation point of view, this step is not limited to contract signature, it also involves aligning expectations on roles, timelines, data responsibilities, revenue sharing mechanisms, and performance indicators. Clear contractual allocation at this stage is essential to avoid operational ambiguity during service delivery;
3. **Customer Onboarding** – Effective onboarding is a critical transition point between contractual design and operational reality. The OSS must implement transparent and standardised onboarding procedures aligned with HoT II, including provision of mandatory information, management of consent for data access, and respect of cooling-off periods. From an operational perspective, onboarding also involves technical pre-assessments, scheduling of installations or platform integration, and initial customer communication. Well-designed onboarding processes reduce early dropouts and establish trust from the outset;
4. **Service Deployment** – This phase covers the practical rollout of the bundling of services, including installation of equipment, activation of digital platforms, and commissioning of control or monitoring systems. Deployment requires close coordination between partners to ensure that technical works, data integration, and customer communication are synchronised. Implementation experience shows that clearly defined deployment checklists and acceptance criteria are valuable tools to ensure that contractual obligations are met before the service enters the operational phase;
5. **Operation and Monitoring** – Once the bundle of services is in operation, the OSS is responsible for ensuring continuous service delivery in line with contractual commitments. This includes monitoring performance indicators, managing demand-side flexibility activations (if applicable), handling customer inquiries and coordinating maintenance activities. Operational monitoring must be closely linked to contractual performance requirements, particularly if the remuneration or guarantees depend on measured outcomes. Regular reporting and communication with both customers and partners support transparency and early identification of issues;
6. **Review and adaptation** – Integrated energy services operate in dynamic environments characterised by evolving regulations, technologies, and customer expectations. The BungEES contractual framework explicitly allows for periodic

reviews and adjustments. From an implementation perspective, this requires structured evaluation of service performance, customer satisfaction, and partner collaboration. Adaptations should be implemented through formal contractual mechanisms, such as annex updates or agreed amendments, rather than informal operational changes. This preserves legal certainty while allowing the OSS model to evolve over time.

This structured six step approach provides a practical roadmap for translating OSS contractual arrangements into reliable service delivery. While the steps are presented sequentially, implementation is inherently iterative, with feedback from later stages informing earlier decisions. When applied consistently, this process supports scalability, reduces implementation risk, and ensures alignment between contractual intent and operational practice.

## 4.2 Tools and Resources for an Effective and Successful Implementation of One-Stop-Shops

While contracts define rights and obligations, effective OSS implementation depends on the availability of appropriate tools, resources, and organisational capabilities. This section identifies the key enablers required to operationalise the BungEES contractual framework.

### 4.2.1 Contractual and Legal Tools

Contractual and legal tools constitute the structural backbone of the One-Stop-Shop (OSS) implementation model. While BungEES Deliverable D5.2 defines the content and architecture of the BungEES contractual framework, a successful implementation depends on how these contracts are operationalised, maintained, and adapted over time. From an implementation perspective, contractual tools must support clarity, consistency, and replicability while remaining flexible enough to accommodate different national contexts and service configurations.

The Heads of Terms (HoT I and HoT II - see Annex A2 and A3) developed in Deliverable D5.2 provide a stable contractual core, complemented by annexes that can be adapted to national and service-specific requirements.

For implementation purposes, OSS operators should follow the following good practices:

- Maintain version-controlled contract templates to ensure consistency across customers and partners;
- Clearly link contractual clauses to operational procedures (e.g. data access, billing cycles, performance reporting);

- Ensure that consumer-facing documents use plain language and avoid unnecessary legal complexity.

The developed Heads of Terms (I and II) provide a stable contractual core for both business-to-business (HoT I) and business-to-consumer (HoT II) relationships. Standardisation reduces transaction costs, shortens negotiation cycles, and limits legal uncertainty, particularly when services are replicated across multiple projects or regions. For OSS operators, maintaining a controlled and consistent set of contractual templates is therefore essential to ensure consistency across customers and partners. However, standardisation does not imply rigidity or low flexibility. Implementation processes require that contracts need to be modular, allowing annexes or schedules to be adapted to specific service bundles, technologies, pricing models, or national legal requirements. OSS operators must therefore establish clear internal rules on which contractual elements are fixed and which can be adapted without undermining the integrity of the overall framework. This distinction is particularly important to avoid ad hoc modifications that may create inconsistencies or unintended legal risks.

The transformation of legal clauses into operational guidance is another key issue. Contracts should not be treated solely as legal documents but as reference tools for internal teams and partners guidance. OSS operators should ensure that key contractual obligations—such as performance guarantees, data protection requirements, service levels, and termination rights—are clearly understood by operational staff and reflected in business’s internal procedures. This reduces the risk of non-compliance arising from misinterpretation rather than intent.

National legal adaptation is another issue that need to be addressed from the contractual and legal point of view. Consumer protection rules, contract law principles, and sector-specific regulations vary across Member-States. While the BungeES framework is designed to be EU-policy aligned, OSS operators must ensure that contracts are reviewed for compliance with national requirements, such as mandatory information obligations, specific invoicing rules, etc. It is very important that this adaptation takes place at annexes level or as national addenda, preserving the common contractual core to support replication.

Additionally, contractual and legal tools play a central role in risk allocation and dispute prevention. Clear definitions of roles, responsibilities, liabilities, and exit conditions reduce ambiguity and limit the likelihood of conflicts between partners or with customers. From an implementation point of view, OSS operators should pay particular attention to clauses related to partner substitution, and service continuity. These provisions must be supported by practical procedures to ensure that contractual protections can be exercised effectively if needed.

Finally, contractual governance mechanisms are essential to manage changes over time. Integrated energy services operate in a dynamic environment where regulatory frameworks, technologies, and market conditions are in constant evolution. Contracts must therefore

include review and amendment clauses that allow for structured adaptation without undermining legal certainty or consumer trust. OSS operators should establish internal processes to manage regular contractual updates in a controlled and transparent manner, ensuring that changes are documented, communicated, and implemented consistently.

To conclude, contractual and legal tools are not merely preparatory elements of OSS implementation. They are living instruments that structure relationships, guide operations, and enable scalability. When properly designed, standardised, and operationalised, they provide the legal stability and flexibility required to deploy integrated energy services across diverse markets and organisational settings.

#### 4.2.2 Digital Platforms and Data Management

Digital platforms and data management systems are a critical enabler of an effective implementation of One-Stop-Shop (OSS) contractual arrangements. Integrated energy services rely on continuous data flows to enable service coordination, performance monitoring, billing, and customer engagement. Without robust digital infrastructure, the contractual principles defined in the BungEES framework cannot be operationalised in a reliable or scalable manner.

At the core of OSS implementation is the ability to collect, process, and exchange data across multiple actors and technical systems. This includes energy consumption data, device status information, flexibility activation signals, performance indicators, and customer interaction data. OSS operators must therefore deploy or integrate digital platforms capable of handling different data sources while ensuring interoperability between partner systems, as foreseen under the Bundled Energy Service Master Agreement (HoT I).

Customer Relationship Management (CRM) software and systems play a crucial role in this context. They support customer onboarding, consent management, communication, and support throughout the bundle of services lifecycle. From an implementation perspective, CRM systems must be closely linked to contractual processes, ensuring that data access rights, opt-in and opt-out choices, and communication preferences defined in the OSS Customer Contract (HoT II) are respected in practice. Poor integration between CRM tools and operational platforms can lead to contractual non-compliance and customer dissatisfaction. Data management platforms must also support performance-based service delivery. In contract where remuneration or contractual obligations depend on achieved energy savings or delivered flexibility, digital tools must enable reliable measurement and verification. In these cases, AM&V is the most adequate solution since it reduces administrative burden, improve transparency, and strengthen trust among customers and partners by linking contractual outcomes to verifiable data. This is particularly important in multi-partner settings, where performance data underpins revenue sharing and accountability.

Interoperability is another critical implementation requirement, since OSS models typically integrate equipment and platforms from different technology providers. Secure Application

Programming Interfaces (APIs) and common data standards are therefore essential to avoid vendor lock-in and excessive integration costs. From an implementation point of view, OSS operators should prioritise modular and scalable digital architectures that allow new partners or services to be added without major system redesign.

Data governance and cybersecurity are also equally important. The BungEES contractual framework places strong emphasis on data protection, privacy, and transparency. Digital platforms must therefore incorporate GDPR-compliant consent management, data minimisation principles, and robust cybersecurity measures. These technical safeguards are the operational counterpart to contractual data protection clauses and are essential to maintaining customer trust and regulatory compliance.

Finally, digital platforms should support internal coordination and decision-making processes. The existence of dashboards that aggregate operational, financial, and performance data, enable OSS operators to monitor service delivery, identify issues early, and support continuous improvement. Such tools also facilitate structured reporting to partners, customers and public authorities or programme managers.

#### 4.2.3 Organisational Capabilities and Skills

Implementing OSS contracts require a high level of organisational capabilities that go beyond traditional energy service delivery. These key organisational skills include service orchestration and partner coordination; Engagement and communication expertise to attract customers, particularly for explaining bundled and flexibility-based services; Know-how and experience in performance monitoring and KPI management; and regulatory awareness across energy, consumer protection, and data protection domains.

Bundled energy services introduce a level of operational complexity that exceeds traditional energy efficiency projects or single-service offerings. As a result, OSS operators must develop or secure a combination of managerial, technical, and customer-facing competencies that allow contracts to be translated into reliable service delivery.

As previously mentioned, a first critical organisational skill concerns the service orchestration. Unlike vertically integrated models, the BungEES OSS approach relies on coordinating multiple specialised actors under a common contractual framework. This requires internal capacity to manage interfaces between partners, align timelines, resolve conflicts, and ensure that responsibilities defined under the Bundled Energy Service Master Agreement (HoT I) are effectively executed. OSS operators must be able to act as integrators, maintaining an overview of the entire service chain rather than focusing solely on individual components. Customer engagement and communication skills represent a second core capability. As highlighted in BungEES Deliverable D2.5, Smart Energy Efficiency Services (EES) often involve behavioural dimensions, such as changes in consumption patterns or participation in demand-side flexibility. OSS staff must therefore be able to explain services clearly, manage expectations, and respond to customer concerns in a transparent and consistent manner. This

expertise is particularly important during onboarding and early operation phases, when misunderstandings can easily lead to disengagement or contract termination.

Performance monitoring and data interpretation are also an essential organisational skill. Performance-based contracts, as promoted by the BungEES framework, require the ability to track KPIs, interpret consumption and flexibility data, and link technical results to contractual and financial consequences. OSS operators must ensure that relevant staff understand both the technical and contractual implications of performance indicators, enabling timely corrective actions when deviations occur. This capability also supports reporting obligations toward partners, customers, and, where relevant, public authorities or funding bodies.

Regulatory awareness constitutes another important competence in this area. OSS implementation operates at the intersection of energy regulation, consumer protection law, and data protection requirements. Organisational capacity must therefore include at least a basic understanding of applicable national and EU rules, even when detailed legal analysis is outsourced. This awareness enables OSS operators to identify regulatory risks early, adapt operational practices accordingly, and ensure that contractual commitments remain enforceable and compliant over time.

In practice, not all OSS operators will possess all the above-mentioned skills in house. The BungEES contractual framework explicitly allows for the use of subcontractors and external service providers to fill resources and expertise gaps. However, implementation experience shows that outsourcing does not remove the need for internal coordination and oversight capacity. OSS operators must retain sufficient internal expertise to supervise subcontracted activities, verify compliance with contractual obligations, and remain accountable toward customers under the OSS Customer Contract (HoT II).

Finally, organisational learning and adaptability should also be considered as core capabilities. Integrated energy services are evolving rapidly, and OSS operators must be able to learn from operational experience, pilot outcomes, and customer feedback. Establishing internal feedback loops, training programmes, and knowledge-sharing practices supports continuous improvement and reduces the risk of repeating implementation errors across projects or markets.

To conclude, without adequate internal capacity to orchestrate partners, engage customers, monitor performance, and manage regulatory complexity, even well-designed contractual arrangements will fail to deliver their intended value. Strengthening these capabilities is therefore a prerequisite for scaling up the bundling of energy services beyond pilot stages and into mature market deployment.

#### 4.2.4 Financial and Billing Tools

Bundled services often combine fixed fees, performance-based components, and external revenue streams (e.g. flexibility markets). The billing systems need to be able to manage

shared revenues among partners in line with HoT I. Moreover, a predictable and transparent billing is crucial to ensure customer trust, as well as for internal financial management.

From an implementation perspective, there are specific requirements for financial management and billing tools that go beyond those used in traditional energy supply or single-service contracts. Effective financial and billing systems are therefore a critical enabler of OSS deployment and long-term viability. At customer level, the OSS model is based on the principle of simplicity and predictability. Regardless of the number of actors involved behind the scenes, the customer must receive a clear and understandable invoice, from a single entity, reflecting the integrated nature of the contracted bundle of service. This requires billing systems capable of aggregating different cost and revenue components into one consolidated charge. These components may include fixed service fees, variable performance-based elements, equipment-related charges, and, where applicable, incentives or rewards linked to demand-side flexibility participation.

Transparency is a crucial key requirement. Since invoices should remain simple, OSS operators must be able to provide clear breakdowns of charges when required by regulation or requested by customers. This is particularly important in jurisdictions with strict consumer protection rules or price transparency obligations. Financial tools must therefore support both simplified customer-facing billing and more detailed internal accounting views, ensuring consistency between what is contractually promised and what is financially delivered.

From the OSS perspective, billing tools must also support internal revenue allocation among partners. Under the Bundled Energy Service Master Agreement (HoT I), revenues may be shared between ESCOs, aggregators, technology providers, or other partners based on predefined formulas or performance indicators. Financial systems must be able to track these allocations accurately, link them to verified performance data if applicable, and manage settlements in a timely manner. Failure to do so can create disputes between partners and undermine trust within the OSS ecosystem.

Performance-based service components introduce additional complexity. If remuneration depends on achieved energy savings, delivered flexibility, or other KPIs, billing systems must be integrated with Automated Measurement and Verification (AM&V) tools. This ensures that financial flows are directly linked to validated results, as foreseen in the BungEES contractual framework. The automation of these processes reduces administrative burden, limits errors, and increases credibility for both customers and partners.

Predictability of cash flows is another critical implementation aspect. OSS operators must manage the timing mismatch that may arise between customer payments, partner remuneration, and external revenue streams such as flexibility market payments. Financial tools should therefore support cash-flow forecasting and risk management, allowing OSS operators to anticipate liquidity needs and avoid operational disruptions.

Moreover, financial and billing tools must also be adaptable to national contexts. VAT treatment, invoicing formats, payment methods, and consumer billing regulations vary across

Member-States. OSS implementation requires billing systems that can accommodate these differences without requiring customized solutions for each project. The use of modular, configurable billing platforms supports replication and scaling up of the OSS model across different markets. Financial and billing tools are not merely administrative components of OSS implementation. They are structural elements that translate the contractual logic of bundled services into concrete, trustworthy customer interactions and stable partner relationships. When properly designed and integrated, they support transparency, fairness, and scalability, all of which are essential for the market uptake of integrated energy services.

#### 4.2.5 Communication and Trust-Building Resources

An effective and successful implementation depends on trust. The OSS operators should invest in robust communication tools and practices that clearly explain the contracted service(s) benefits, obligations, and risks to customers, as well as tools that provide timely information on service events (e.g. demand response activations), offer accessible support channels to customers and complaint resolution mechanisms. These elements are not ancillary, they are crucial for the success of the business model and an integral part of the contractual logic of the BungeES model, which places consumer protection and transparency at its core.

As mentioned above, effective communication and trust-building are not peripheral activities within the BungeES One-Stop-Shop (BOSS) model. They are core implementation requirements that directly influence customer onboarding and uptake, engagement, and long-term retention. Bundled energy services integrate multiple technical, financial, and behavioural components that are often unfamiliar to end-users. As a result, trust cannot be assumed to arise automatically from contractual clarity alone. It must be actively built and maintained through structured communication practices embedded in OSS operations.

From an implementation perspective, communication resources must support the entire customer journey, starting from first contact and extending throughout the service lifecycle. At the onboarding stage, customers need to clearly understand what services are included in the bundle, which elements are optional, what degree of automation or control is involved, and which benefits (e.g. energy savings, comfort improvements, or flexibility revenues, etc.) are generated. This requires communication materials that clearly translates contractual terms into plain language explanations, supported by concrete examples and realistic scenarios. Overly technical descriptions or overly optimistic claims may cause misunderstanding and weaken trust at an early stage, which may put the project at risk.

Once the service (or bundle of services) is operational, communication shifts from explanation to reassurance and engagement. This is particularly important for flexibility-based services, where service actions may occur automatically or in response to external signals (e.g. from aggregator, DSO, etc.). Customers need to understand when and why these actions take place, how they affect comfort or daily routines, and what value they deliver. Timely

notifications, user-friendly dashboards, and periodic summaries of achieved benefits are key tools to make the services visible, otherwise they will remain as invisible tangible services.

These resources operationalise the transparency principles embedded in the OSS Customer Contract (HoT II) and help to prevent perceptions of loss of control or opaque behaviour. Trust-building also depends on the availability of accessible and responsive support channels. OSS operators should ensure that customers have clear points of contact for questions/doubts, complaints, or contract termination requests, and that response times and escalation procedures are consistent with contractual commitments. In practice, this often requires dedicated customer support capacity rather than exclusive reliance on automated systems. Experience from BungEES pilots confirms that how issues are handled has a stronger impact on trust than the mere absence of issues.

Another critical implementation aspect concerns the communication of changes or modification to the service. Integrated services evolve over time as technologies, market conditions, or regulatory frameworks change. Customers may therefore need to be informed about updates to service scope, operational conditions, or pricing structures. Such changes should be communicated proactively, in advance, and in non-technical language, in line with the notification requirements defined in HoT II. Failure to communicate changes clearly can erode trust even when contractual provisions allow for adaptation.

Finally, trust-building extends beyond individual customer interactions to the overall credibility of the OSS. Consistent branding, transparency about the roles of participating partners, and clear communication on data protection and privacy practices all contribute to perceived legitimacy. For prospective and registered this implies explaining who is responsible for each service element, how customer data is used, and what safeguards are in place. These practices reinforce compliance with EU consumer protection and data protection principles while directly addressing behavioural barriers identified by BungEES team. Summarizing, communication and trust-building resources are essential implementation tools that connect contractual commitments with customer perception and behaviour. When properly resourced and embedded in OSS operations, they reduce attrition, limit disputes, and support the scaling of bundled energy services beyond early adopters.

#### 4.3 Ensuring Consistency Between Contracts and Operations

A recurring risk identified in pilot project is the gap between contractual design and operational practice. To mitigate this risk, OSS operators should establish internal procedures that explicitly map contractual clauses and link them to operational actions. Regular internal audits, partner reviews, and customer feedback mechanisms can help to ensure that implementation remains aligned with contractual commitments.

The first step to ensure consistency is the systematic translation of key contractual clauses into internal operational procedures. This applies to both B2B and B2C dimensions. For example, clauses related to performance obligations, data access rights, service levels, and

termination conditions should not remain as abstract legal provisions. They must be mapped/linked to concrete actions, responsibilities, and decision points within the OSS organisation.

In practice, this means that OSS operators should develop internal implementation manuals or procedures explicitly mapping each critical contractual obligation to a responsible team or function, a supporting digital tool or platform, a verification or control mechanism and an escalation or corrective-action pathway.

For instance, performance guarantees defined in the OSS Customer Contract (HoT II) should be mirrored by clear internal processes for monitoring KPIs, validating data quality, and triggering corrective measures when deviations occur. Similarly, substitution and step-in rights defined under the Bundled Energy Service Master Agreement (HoT I) must be supported by predefined partner replacement procedures to avoid service disruption.

Consistency between contracts and operations also depends on governance arrangements within the OSS ecosystem. Due to the multi-actor nature of bundled energy services, misalignment often arises in the relations between partners rather than within a single organisation. To address this risk, OSS operators should establish regular coordination and communication mechanisms among partners, such as periodic operational briefings focused on service delivery and performance, joint KPI dashboards shared between relevant partners, well-established communication protocols for incidents, delays, or customer complaints, as well as clear decision-making rules for service adaptations or contractual changes.

These coordination mechanisms operationalise the collaboration principles embedded in HoT I and help to prevent informal practices from undermining contractual clarity. They are particularly important in partnership models, where responsibilities and revenues are shared, but also relevant in service-provider models with multiple subcontractors.

Integrated energy services are delivered over multi-year periods and operate in a dynamic environment characterised by evolving regulation, technology, and market conditions. Ensuring consistency therefore does not mean freezing operations to the initial contract design. Instead, it requires structured change management aligned with contractual review and amendment clauses. OSS operators should implement formal review cycles, as foreseen in the BungEES contractual framework, to assess service performance against contractual expectations, customer satisfaction and behavioural responses, regulatory or market developments affecting service viability and the existence of opportunities to upgrade or expand service bundles.

Any resulting changes should be implemented through controlled contractual amendments or annex updates, rather than informal operational adjustments. This preserves legal certainty, protects consumer rights, and maintains trust among partners.

Finally, maintaining consistency requires continuous monitoring and, where appropriate, internal and external auditing. OSS operators should periodically verify that operational practices

remain compliant with contractual commitments, particularly in sensitive areas such as data protection, billing transparency, and performance reporting. Customer feedback mechanisms play an important role in this process, complaints or low-engagement rates often signal misalignment between contractual promises and operational delivery. By systematically analysing such feedback loops, OSS operators can identify gaps and implement corrective actions before they escalate into contractual disputes or reputational damage.

Considering all this, consistency between contracts and operations should be understood as a dynamic process of continuous improvement. When properly managed, it reinforces the credibility of the OSS model, reduces legal and operational risk, and supports the long-term scalability of integrated energy services.

## 5. Market Barriers and Constraints to One-Stop-Shop Implementation

### 5.1 Market Design Implementation Challenges and Constraints at National Level

The implementation of One-Stop-Shop (OSS) models for bundled energy efficiency and flexibility services is strongly influenced by national market design choices, regulatory frameworks, and the maturity of the energy service market. Since European directives provide a common high-level framework, their transposition into national law and their interaction with legacy market structures usually tend to be very different across the different Member-States.

This section analyses the main market design-related challenges and constraints affecting the implementation of OSS models in five countries involved in the BungEES project: Portugal, Spain, France, the Czech Republic, where BungEES pilots were developed and also in Germany. The analysis is focused on barriers linked to regulation, market organisation, roles and responsibilities of actors, data access, and contractual feasibility, all of which directly affect the replicability and scalability of the proposed contractual arrangements.

#### 5.1.1 Portugal

Portugal has made notable progress in promoting energy efficiency and demand-side participation, but several structural and regulatory constraints continue to limit the large-scale deployment of OSS models. Below, some of these barriers and constraints are presented.

**Regulatory fragmentation and scope limitations** - Portuguese regulation traditionally treats energy efficiency, electricity supply, and demand response as distinct domains. This separation ensures clarity of responsibilities, but it also complicates the delivery of integrated service packages under a single contractual umbrella. OSS providers face difficulties in combining energy efficiency services with flexibility or demand response without triggering multiple licensing or compliance requirements;

**Demand response framework maturity** - Although Portugal has introduced demand response mechanisms, particularly in wholesale and balancing markets, participation remains limited and largely confined to larger consumers or aggregators with strong technical capabilities. For residential and small tertiary customers, regulatory complexity, prequalification requirements, and limited or non-existent remuneration streams reduce the attractiveness of flexibility as part of a bundled offer;

**Role of DSOs and data access constraints** - Distribution System Operators play a central role in metering and data management. In Portugal the smart metering deployed just achieved 99,5%. However, since OSS providers rely on the DSO for timely access into consumption data, the access procedures can be slow and highly bureaucratic. This limits the ability of OSS

providers to deliver performance-based contracts, conduct Measurement and Verification (M&V), and guarantee savings or flexibility outcomes;

**Consumer protection and contractual rigidity** - Portuguese consumer protection rules are strong, particularly for residential customers. While this builds trust, it also introduces rigidity in contract duration, termination rights, and pricing structures. OSS models based on long-term service delivery or performance guarantees must carefully balance flexibility with compliance, often resulting in conservative contractual designs that limit innovation.

**Market maturity and financing constraints** - The ESCO and energy services market in Portugal is relatively small and most project took place in public sector buildings. Limited access to private financing for residential or SME-focused OSS models constrains scalability. Financial institutions often lack familiarity with bundled service contracts, especially those involving flexibility revenues, which increases perceived risk.

However, there are some good examples of OSS in Portugal, covering both established services and innovative models that support citizens and organisations in energy efficiency, renovation, and sustainable energy . Some examples are presented below.

- ✓ **Porto Energy Hub** - is a functioning One-Stop Shop in the city of Porto that provides integrated support for energy efficiency, renewable technologies, and energy planning. It offers citizens and local entities free information, technical assistance, and guidance throughout the planning and implementation of energy efficiency measures, from initial evaluation to identifying suitable solutions such as improved insulation, windows, heating systems, and renewable energy options;
- ✓ **CasA+ (Digital One-Stop Shop)** - is a national digital OSS platform created by the Portuguese National Energy Agency (ADENE) to support energy-efficient building renovation. It acts as a central hub where homeowners can find information, tools, and links to relevant programmes and qualified professionals responsible for energy performance assessment, renovation planning, and financial support;
- ✓ **AREANATEjo Regional OSS (Alto Alentejo)** - operates a regional one-stop service offering personalised technical advice for building energy renovations. It enables property owners to seek guidance directly at municipal facilities such as Sousel or remotely via email or questionnaires;
- ✓ **Additional More Recent Emerging OSS Initiatives** – Espaço Energia in Coimbra, RENOVAR.Coimbra, etc.

### 5.1.2 Spain

Spain offers a dynamic and evolving context for OSS implementation, but regulatory complexity and frequent changes in market rules pose significant challenges. Some of these challenges are:

**Regulatory instability and complexity** - Over the past decade, Spain has undergone multiple regulatory reforms affecting renewable energy, self-consumption, and market participation. Although recent reforms have improved conditions for distributed generation and flexibility, regulatory uncertainty remains a concern for long-term OSS business models that rely on stable revenue streams;

**Demand response and aggregation barriers** - The Spanish framework for independent aggregation is still developing. While pilot projects and regulatory sandboxes exist, full market access for aggregators remains constrained. OSS providers seeking to integrate demand response into their offers face uncertainty regarding market entry conditions, remuneration mechanisms, and coordination with suppliers;

**Self-consumption and community energy interaction** - Spain has made significant progress in enabling self-consumption and energy communities. However, the interaction between these models and OSS offerings is not always clear. OSS providers may face ambiguity regarding their role within energy communities, especially when combining shared generation, individual efficiency measures, and flexibility services;

**Data access and interoperability issues** - Despite advanced smart metering deployment, access to granular consumption data remains a challenge. Data platforms are often not fully interoperable, and administrative procedures for data access can be difficult. This affects OSS providers ability to offer transparent billing, performance monitoring, and dynamic optimisation services;

**Consumer trust and awareness** - Spanish consumers have historically experienced rapid changes in energy tariffs and policies, which affects trust in long-term energy contracts. The OSS models must therefore invest heavily in transparency and communication strategies, which will increase for sure the customer acquisition costs and will slow down the market uptake.

### 5.1.3 France

France presents one of the most advanced environments for OSS implementation, but it also allows to observe how strong regulation can both be an enabler and a constrain to innovation. Some of these constraints are:

**Highly structured regulatory environment** - France benefits from a well-defined yet complex framework for energy efficiency services, including energy saving certificates. This framework provides financial incentives and market stability, but it also introduces complexity. OSS

providers must navigate detailed compliance rules and reporting obligations, which can increase administrative costs and limit flexibility in service design;

**Centralised market organisation** - The French energy market is characterised by a strong role of incumbent actors and centralised systems. This allows to support large-scale programmes, but it can also limit entry opportunities for smaller OSS providers and innovative business models, particularly those targeting niche customer segments;

**Demand response integration challenges** - France has a well mature demand response market, but integration with energy efficiency and customer-facing OSS models remains challenging. Demand response mechanisms are often designed for standalone participation, requiring OSS providers to manage parallel contractual arrangements and revenue allocation schemes;

**Consumer protection and standardisation** - French consumer law strongly emphasises transparency, standardisation, and comparability of offers. This typically supports trust, but it may also limit the customisation of OSS contracts. Providers must carefully structure bundled offers to ensure clarity without oversimplifying complex service interactions;

**Data governance and privacy** - France has advanced data governance frameworks, but strict data protection requirements can slow down innovation. OSS providers must invest in robust compliance mechanisms, which will increase entry costs and operational complexity.

#### 5.1.4 Czech Republic

The Czech Republic represents a less mature but rapidly evolving market for OSS models, with distinct structural challenges, as presented below.

**Limited market experience with OSS concepts** - The concept of integrated, customer-centric OSS models is still emerging. Market actors often lack experience with bundled service delivery, leading to cautious approaches and limited experimentation. This affects both supply-side readiness and customer acceptance;

**Regulatory focus on traditional supply models** - Czech energy regulation remains strongly oriented towards traditional supply and network operations. Energy efficiency and flexibility are recognised in policy documents but are not yet fully embedded in market design. OSS providers face uncertainty regarding long-term regulatory support;

**Demand response and aggregation underdevelopment** - Demand response mechanisms are at an early stage, with limited opportunities for residential or SME participation. The absence of mature aggregation frameworks reduces the value proposition of flexibility-based OSS offers;

**Financing and risk perception** - Access to financing for innovative energy services is limited. Financial institutions often perceive OSS models as high-risk due to unclear revenue streams and limited track records. This constrains scaling and replication;

**Institutional capacity and coordination** - Coordination between regulators, DSOs, and market actors remains a challenge. OSS implementation often requires case-by-case negotiations, increasing transaction costs and slowing deployment.

### 5.1.5 Germany

Germany did not host a BungeES pilot, however the country represents a very large and technically advanced market, with higher level of complexity, which creates significant barriers for OSS implementation. Some of them are listed below.

**Highly decentralised and complex market structure** - Germany's federal system and decentralised energy governance result in heterogeneous rules and practices across regions. OSS providers must navigate varying interpretations of regulation, grid access conditions, a large number of DSOs (more than 700) and local requirements;

**Strong separation of market roles** - German regulation strongly enforces the unbundling of supply, network operation, and services. While this ensures competition, it complicates integrated OSS models that seek to combine multiple services under a single contract;

**Demand response market limitations** - Despite high technical potential, demand response participation remains limited. Regulatory requirements, market access barriers, and relatively low price signals reduce the economic viability of flexibility-based OSS offerings;

**Data access and digitalisation gaps** - Germany has faced delays in smart meter rollout, which results in limited access to high-resolution consumption data. This situation is a very strong barriers for the large-scale deployment of advanced OSS functionalities such as real-time optimisation, dynamic pricing, and automated flexibility activation;

**Consumer expectations and risk aversion** - German consumers tend to be risk-averse and highly sensitive to data protection and contract terms. OSS providers must offer very clear value propositions and robust guarantees, which can increase costs and reduce flexibility in contract design.

### 5.1.6 Cross-country Remarks

Across the above analysed five countries, several common themes emerge:

- Market design often lags behind policy ambitions for integrated energy services;

- Demand response and flexibility frameworks remain insufficiently aligned with customer-centric OSS models;
- Data access and interoperability are critical enablers that are not yet fully realised;
- Strong consumer protection, while essential, can unintentionally constrain innovation if not accompanied by adaptive regulatory approaches.

These national-level challenges confirm the relevance of the BungEES contractual framework and the guidelines to its application to guarantee flexibility, clarity, and replicability of the services while remaining compliant with diverse regulatory environments. The following section (5.2) builds on this analysis by examining real-world, operational challenges observed during OSS implementation.

## 5.2 Real-world Challenges for the OSS Model

Section 5.1 highlighted structural and regulatory constraints arising from national market design, the practical implementation of One-Stop-Shop (OSS) models also reveals a set of real-world challenges that cut across regulatory contexts. These challenges emerge during project development, customer acquisition, service delivery, contractual execution, and long-term operation of bundled energy services.

Real-world challenges are often less visible in policy or regulatory analysis, but they play a crucial role in determining whether OSS models can move from pilot scale to large-scale market deployment. They are linked to operational complexity, stakeholder coordination, customer behaviour, risk allocation, digital readiness, and the financial sustainability of integrated offers.

This section draws on insights from stakeholder interviews, pilot experiences, and market observations within the BungEES project. It focuses on challenges that directly affect the feasibility, bankability, and replicability of the contractual arrangements proposed in this deliverable.

### 5.2.1 Customer Acquisition and Engagement Challenges

The customer acquisition or onboarding, as well as its engagement directly depends on three factors:

#### ➤ **Complexity of the value proposition**

One of the most persistent real-world challenges for OSS models is explaining a complex, multi-service value proposition to customers in a clear and compelling way. Bundled offers often combine energy efficiency measures, flexibility services, digital tools, and sometimes onsite generation or storage. Since this integration creates value

at system level, customers may struggle to understand how benefits are generated, measured, and shared. In practice, OSS providers must simplify communication procedures without oversimplifying contractual arrangements. This tension often leads to conservative offers that under-utilise available flexibility or avoid performance-based remuneration, reducing the overall economic potential of the model;

➤ **Trust and perceived risk**

Customer trust is a decisive and crucial factor, particularly in residential and SME segments. Many customers are cautious or reluctant concerning long-term contracts, variable remuneration linked to flexibility markets, as well as remote control of assets such as heat pumps or EV chargers. Past negative experiences with energy suppliers or installers may further reinforce the customers scepticism. OSS providers often need to invest significant time and resources in trust-building activities, including face-to-face engagement, pilot demonstrations, and guarantees. These efforts increase customer acquisition and onboarding costs and slow down scaling, especially when compared to standard energy retail products;

➤ **Heterogeneity of customer profiles**

OSS models must be tailored to a wide range of customer profiles, building types, usage patterns, and technological configurations. This heterogeneity complicates standardisation of offers and contracts. In practice, OSS providers face a trade-off between offering highly customised solutions and maintaining operational efficiency.

The contractual framework proposed in BungEES seeks to address these challenges through modularity and annex-based structures. However, implementing this flexibility in real-world sales and onboarding procedures still is a resource-intensive activity.

### **5.2.2 Coordination Among Multiple Service Providers**

Coordination of multiple stakeholders (e.g. service providers) is also another major real-world challenge. To address this challenge the energy service providers or the BESP (Bundled Smart Energy Provider) need to improve the following activities:

➤ **Coordination of multi-actor value chains**

OSS models rely on well-defined collaboration between multiple actors, including installers, aggregators, ESCOs, technology providers, digital platform operators, and sometimes energy suppliers. Coordinating these actors under a single customer-facing contract is operationally complex. In practice, misalignment of incentives, timelines, and different levels of acceptable risk can lead to delays, disputes, or underperformance. For example, an installer may prioritise rapid deployment, while a flexibility aggregator focuses on long-term asset availability and performance.

➤ **Allocation of responsibilities and liabilities**

The clear definition of roles and responsibilities is essential, yet difficult, especially when services are interdependent. Real-world projects often reveal grey areas, such as responsibility for underperformance caused by user behaviour, equipment malfunction, or external grid constraints. Without clear contractual arrangements (such as proposed by the BungEES model), OSS providers may end up absorbing risks that were not fully anticipated. This reinforces the importance of the Head of Term I framework (see Annex A2) but also highlights the need for continuous coordination and monitoring beyond contractual signatures.

➤ **Operational interfaces and communication gaps**

Even when contracts are well-designed, operational coordination can break down due to poor communication or incompatible processes. Differences in IT systems, reporting formats, and service standards create friction and increase transaction costs.

The above-mentioned challenges are particularly important when scaling up OSS models across regions or cross borders, where local partners may operate under different norms and capabilities.

### 5.2.3 Technical Integration and Asset Heterogeneity

The technical integration, interoperability and asset heterogeneity especially in cross borders OSS models is particularly important. To avoid these issues the following items need to be considered by the OSS model.

➤ **Diversity of technologies** - OSS offerings often combine multiple energy services/technologies, such as heat pumps, PV systems, batteries, EV chargers, and building energy management systems. Each technology comes with its own technical requirements, performance characteristics, and maintenance needs. In real-world deployments, integrating these assets into a coherent control and optimisation framework is challenging. Compatibility and interoperability issues, firmware updates, and varying communication protocols can limit the ability to deliver promised flexibility or efficiency outcomes;

➤ **Installation quality and commissioning** - The quality of installation and commissioning process has a very strong direct impact on the delivered service performance. However, OSS providers often depend on third-party installers with very different levels of expertise. Inconsistent installation quality can lead to underperformance, customer frustration, and disputes over responsibility. Ensuring consistent standards requires training, certification, and quality control mechanisms, which increase upfront costs and operational complexity;

➤ **Reliability and availability of assets** - Flexibility-based services depend on the availability and reliability of customer assets. In practice, assets may be unavailable

due to maintenance issues, user override, or changes in household behaviour. These factors introduce uncertainty into performance-based contracts and revenue projections.

OSS providers must design contracts and operational strategies that account for such variability, using conservative assumptions, aggregation across large customer portfolios or using predictive methods such as machine learning and artificial intelligence algorithms.

#### **5.2.4 Data Management, Digitalisation, and Interoperability**

This is another real-world challenge that should be addressed shortly to allow the large-scale deployment of OSS models. Within this category the following issues are the most pertinent.

➤ **Data availability and quality**

Real-world OSS implementation depends on timely access to high-quality data. Since in some cases data gaps, delays, and inconsistencies are common, metering data may be incomplete or having insufficiently granular, and asset-level data may depend on proprietary systems.

Data quality issues complicate Measurement and Verification (M&V), billing, and performance reporting. They also undermine customer trust when expected savings or flexibility revenues are achieved or cannot be clearly demonstrated.

➤ **Interoperability challenges**

This is still one of the largest challenges, especially in older buildings with a large percentage of legacy equipment or old vendor-lock systems. OSS providers often operate in fragmented digital ecosystems, with multiple platforms and interfaces. Lack of interoperability increases integration costs and limits scalability. In practice, many OSS providers develop customized solutions that work for specific pilots but are difficult/not possible to replicate. Standardisation efforts exist, but to be further enhanced and adoption is uneven across member-States. This remains a significant barrier to the industrialisation of OSS models.

➤ **Cybersecurity and data protection**

As OSS models rely on remote monitoring and control, cybersecurity and data protection become critical concerns. Compliance with data protection regulations requires robust processes and technical safeguards in compliance with European and/or national regulation. In real-world projects, implementing these safeguards can be costly and time-consuming, particularly for smaller service providers. Any data breach or perceived misuse of data can severely damage customer trust and the company brand reputation.

## 5.2.5 Financial and Economic Challenges

Some of the real-world financial challenges to the OSS model are presented below.

### ➤ **Upfront investment requirements**

Many OSS models require significant upfront investments in equipment, digital infrastructure, or customer acquisition. Recovering these investments over time depends on stable service delivery and customer retention. In practice, access to financing remains a major bottleneck, especially for smaller providers or innovative business models. Financial institutions often lack familiarity or expertise to deal with bundled energy service contracts, which increases due diligence requirements and financing costs or even may block projects;

### ➤ **Revenue uncertainty and volatility**

Flexibility revenues are often market-based and subject to price volatility. In real-world conditions, this makes revenue forecasting difficult. OSS providers may therefore rely more heavily on fixed service fees, reducing exposure to market volatility. This conservative approach improves bankability but may weaken the overall business case and may limit incentives for optimal flexibility utilisation;

### ➤ **Customer retention and contract termination**

Early contract termination by customers poses a significant financial risk, particularly when investments have not yet been recovered. Although consumer protection rules allow termination, this creates challenges for OSS models based on long-term value creation. Service providers must balance flexibility for customers with mechanisms to protect their investments, such as exit fees or asset recovery clauses. In practice, negotiating and enforcing such provisions is sensitive and can affect customer perception.

## 5.2.6 Organisational Capacity and Skills

The service provider organisational capacity and skills is also another important real-world challenges.

### ➤ **Skilled workforce shortage**

OSS implementation requires a combination of technical, commercial, legal, and digital skills. Many organisations struggle to build or retain teams with this multidisciplinary expertise. Lack of qualified staff can slow down project development, increase reliance on external consultants, and raise costs. It may also limit the ability to innovate and adapt business models over time.

### ➤ **Changes in the organizational management**

For well-established energy companies, OSS models often require a shift from product-based sales to service-oriented approaches. This cultural change may be difficult to implement, particularly in organisations with multiple departments. Workforce resistance to change, unclear internal incentives, and lack of alignment between departments can undermine OSS initiatives even when market conditions are favourable.

➤ **Scalability constraints**

Processes that work at pilot scale may not scale efficiently. Manual customer onboarding, customized contract negotiation, and intensive customer support can become bottlenecks and quite challenging as the companies portfolios grow. Achieving scalability requires process automation, standardisation, and investment in digital tools, which may not be feasible in early stages for small size companies.

### 5.2.7 Interaction With Public Policies and Support Schemes

The relation between the OSS and public policy and other support schemes is usually a real-world challenges due to high levels of bureaucracy.

- **Administrative burden of support schemes** - Many OSS models rely on public incentives or support schemes for energy efficiency or renewable energy. Since these schemes improve project economics, they also often come with high administrative complexity and uncertainty. Delays in approvals, changes in eligibility criteria, or retroactive adjustments can disrupt business plans and cash flows.
- **Misalignment between policies and OSS logic/model** - Support schemes are often designed for standalone measures rather than integrated services. This misalignment can create dependence on incentives, encouraging OSS providers to prioritise subsidised components over system-optimal solutions. In real-world projects, navigating these inconsistencies requires careful design and sometimes compromises that reduce overall effectiveness.

### 5.2.8 important Points for a Successful Real-world Implementation

Across countries and pilots, several issue need to be considered for the achievement of a successful large-scale deployment of the OSS model:

- OSS models require more than regulatory compliance. They demand strong operational capabilities and stakeholder coordination;
- Customer trust and engagement are as critical as the project technical performance;
- Standardisation and modularity are essential for scalability, but they must be balanced with local adaptation;
- Risk allocation must be realistic and continuously managed, not only contractually defined.

These real-world challenges confirm that the successful OSS implementation depends on aligning contractual design, operational execution, and market realities. The BungEES contractual framework addresses these issues by providing flexibility, clarity, and mechanisms

for risk sharing. However, continued learning and adaptation are required as OSS models evolve and scale over time.

## 6. Lessons Learnt From the BungEES Pilots

The BungEES pilots were designed to test, under real market conditions, the feasibility of deploying bundled energy efficiency and flexibility services through a One-Stop-Shop (OSS) model supported by new contractual arrangements. The previous chapters of this report focused on establishing guidelines for contractual design, implementation requirements, and market barriers, the pilot activities provide practical evidence on how these elements interact in real-world settings. Pilot projects represent a critical step in validating the BungEES approach and for identifying the factors that enable or hinder its effective deployment.

The pilots were implemented in different Member-States, each characterised by distinct regulatory frameworks, market maturity levels, customer profiles, and organisational set-ups. This diversity allowed BungEES to test the robustness and adaptability of the proposed contractual arrangements across varying national contexts. Rather than aiming for direct comparability of quantitative results, the pilot analysis focuses on qualitative insights related to implementation processes, stakeholder coordination, customer engagement, and operational challenges. This chapter consolidates the main lessons learnt from the BungEES pilot experiences, with particular attention to how the OSS Customer Contract (HoT II) and the Bundled Energy Service Master Agreement (HoT I) performed in practice. It highlights what worked well, where adaptations were required, and which assumptions made at the contractual design stage proved difficult to operationalise. The lessons also reflect the interplay between contractual provisions and non-technical factors such as consumer trust, communication practices, data availability, and partner coordination.

By structuring the analysis around country-specific pilot experiences, this chapter aims to extract transferable insights rather than isolated observations. The lessons presented here directly inform the recommendations and conclusions set out in Chapter 7 and provide concrete guidance for market actors and policymakers seeking to replicate or scale up OSS-based bundled energy services beyond pilot projects.

### 6.1 BungEES Pilot in Czech Republic

The BungEES pilot implemented in the Czech Republic provided valuable lessons on the deployment of residential flexibility services within a One-Stop-Shop (OSS) contractual framework, particularly in relation to national technical standards, role allocation between partners, and customer communication. The pilot targeted residential customers equipped with electric heating technologies, including heat pumps, water heaters, and electric accumulation stoves, and it was implemented by SEVEN in cooperation with Voltalis.

- **Customer onboarding and site selection**  
SEVEN pre-selected potential clients based on national electrical standards and Voltalis further filtered sites according to appliance compatibility. The pilot revealed that national technical conditions can significantly constrain the eligible customer base. In the Czech Republic, older buildings still widely rely on the TN-C earthing system, which does not meet current safety requirements for the installation of modern control equipment. As a result, only buildings with a TN-S earthing system and residual current devices were eligible. This considerably narrowed the pool of potential participants and made the selection process more complex. The experience highlights the need to integrate national technical constraints early in customer acquisition strategies and to reflect them clearly in onboarding procedures.
- **Contractual perspective**  
The Czech Republic pilot confirmed the effectiveness of adapting a standardised customer contract to national conditions. Voltalis prepared the base contract, while SEVEN adapted it to the Czech legal and technical environment, including language and metering conventions. End customers signed a dedicated agreement covering project participation, general terms, confidentiality, data protection, and appliance description. Termination conditions were clearly defined: contracts were valid for two years, automatically renewable, and could be terminated by customers at any time without penalty. This flexibility proved important for customer acceptance and trust. However, some operational aspects, such as after-sales support responsibilities and incident response procedures, were not explicitly labelled or detailed, indicating areas for improvement before commercialisation.
- **Role allocation and responsibilities between partners**  
Voltalis assumed full responsibility for equipment provision, installation, operation, maintenance, and removal, as well as liability for damage to heating systems caused by the pilot. SEVEN acted as a co-implementer, managing customer communication and support and ensuring compliance with Czech electrical standards through certified electricians and inspection technicians. This clear division of responsibilities reduced ambiguity and operational risk, confirming the importance of robust HoT I arrangements with back-to-back liabilities to protect the OSS interface.
- **Customer comfort and communication**  
Czech households are particularly sensitive to indoor temperature variations, and any modulation of heating must be carefully explained and managed. To address this concern, the pilot added temperature sensors in participating apartments, which helped to reassure customers and mitigate comfort-related complaints. This experience demonstrates that comfort preservation must be central to both contractual commitments and operational design, especially in markets where heating is perceived as a critical service. Clear communication about control logic, customer override options, and comfort safeguards is crucial for acceptance, as well as for accelerating the decision making process.
- **Exiting the contract and equipment removal**  
The contract allowed customers to request de-installation at any time. Physical removal was organised by an electrician chosen by the customer, with costs reimbursed by Voltalis. While this approach protected customers from financial risk, responsibilities for organising removal

were not fully detailed, suggesting the need for more explicit procedures in future OSS Customer Contracts (HoT II).

➤ **Market readiness challenges**

The technical and contractual set-up proved to be feasible, at the moment SEVEN does not plan to scale up the pilot directly, pointing to limited market incentives and ongoing experimentation with alternative flexibility schemes in the Czech Republic. This underlines that successful commercialisation will depend not only on contractual robustness but also on supportive market conditions and clearer value propositions.

Overall, the Czech pilot confirms that OSS-based flexibility services are viable but highly sensitive to national technical standards, customer comfort expectations (especially in cold climate regions), and clear role allocation. These valuable lessons provide important guidance for adapting the BungEES contractual framework to similar market contexts.

## 6.2 BungEES Pilot in France

The BungEES pilot implemented in France provided important lessons on the deployment of residential demand-side flexibility services under a One-Stop-Shop (OSS) contractual framework. The pilot focused on voluntary households equipped with electric heating systems, including heat pumps, electric heaters, and water heaters, and relied on remote control solutions operated by Voltalis. From a commercial and contractual perspective, the French experience confirmed the relevance of the BungEES contractual architecture while highlighting areas where simplification and clarification are required before large-scale commercialisation.

➤ **Customer selection and engagement**

Participants were recruited on a voluntary basis through existing partner networks. This approach proved effective for pilot implementation but is not easily scalable. Recruitment relied heavily on prior trust relationships and direct explanation of the project, confirming that bundled flexibility services remain difficult to communicate to mass-market customers. The pilot showed that onboarding processes must clearly explain the free-of-charge nature of the service, customer rights, and the possibility to deactivate or withdraw at any time. Ambiguity around these aspects can slow down customer decision-making and reduce participation rates.

➤ **Contractual perspective**

The French pilot validated the feasibility of separating partner-level and customer-level contractual arrangements, in line with the BungEES Heads of Terms. End customers signed a project membership form, which includes a detailed set of responsibilities and liabilities. This structure helped to preserve a simple customer-facing contract while allowing robust risk allocation among professional actors. However, the pilot also revealed that the simplicity of customer contracts can come at the cost of clarity if key elements are not sufficiently standardised. In particular, although customers could terminate participation at any time without penalty, procedures related to equipment removal and complaint handling required more clear and more visible communication.

- **Role allocation and responsibilities between partners**  
 Voltalis assumed responsibility for feasibility assessment, installation, operation, after-sales support, and performance of the flexibility equipment. Installation partners were responsible for the correct installation. Liability for damage during installation or operation was clearly assigned to Voltalis and installation partners. This back-to-back contractual structure proved effective in managing risks and protecting the OSS interface, confirming the importance of robust HoT I arrangements to support customer trust and operational continuity.
- **Customer comfort and operational safeguards**  
 The pilot demonstrated that allowing customers to deactivate the Voltalis remote control of the equipment at any time is essential for acceptance of flexibility services. Contractual provisions clearly assigned responsibility for restoring comfort and resolving equipment-related issues to Voltalis, which helped reassure participants. Nevertheless, the experience highlighted the need to formalise specific response times and complaint-handling procedures more explicitly, especially in a commercial context where customer expectations are higher than in pilots.
- **Data governance and compliance**  
 The French pilot benefited from clear GDPR-aligned arrangements. Voltalis accessed consumption and temperature data solely to deliver the service, while other BungEES partners may access data for research or coordination purposes. Data roles were clearly defined, and safeguards for personal data protection were embedded in both partner and customer agreements. This confirmed that strong data governance is not only a regulatory requirement but also a key trust-building element for customer participation in digitally enabled energy services.
- **Lessons for commercialisation**  
 Before market roll-out, customer communication must be simplified, contractual documents must clearly emphasise the voluntary and reversible nature of participation, and procedures for complaints and equipment removal must be well-defined and standardised. While the service proved to be technically stable and well accepted by participants, scaling will depend on demonstrating clear value for both customers and the energy system, as well as on the existence of a supportive market and regulatory framework.

Overall, the French BungEES pilot confirms that OSS-based flexibility services are feasible and well-suited to residential customers, provided that contracts remain simple for end-users while being robust and detailed at partner level. The lessons learnt underline the importance of clarity, trust, and standardisation as prerequisites for scaling bundled energy services beyond pilot environments.

### 6.3 BungEES Pilot in Spain

The Spanish BungEES pilot provided important insights into the implementation of bundled energy services combining demand-side flexibility with residential heating and cooling systems under a One-Stop-Shop (OSS) approach. This pilot was carried out by Plenitude in

cooperation with Voltalis and CONAIF<sup>14</sup> and focused on residential customers equipped with heat pumps, aerothermal systems, and air-conditioning units. From a commercial and contractual perspective, the pilot highlighted both the robustness of the BungEES contractual logic and several practical challenges that need to be addressed before full commercial deployment.

➤ **Customer selection and engagement**

Whitin this pilot, two regions were targeted, Cantabria and Catalonia, to reflect different climatic conditions and types of equipment. This allowed to test the flexibility service in diverse contexts, however customer onboarding proved to be difficult. Awareness of demand response and flexibility services remains limited in Spain, and many households rely on natural gas for heating, reducing the immediate relevance of electric flexibility solutions. The pilot confirmed that customer trust is a decisive factor. Collaboration with local installers was essential to overcome scepticism, as these actors are perceived as trusted intermediaries. This suggests that OSS models in Spain should rely strongly on local networks and clear communication strategies to reduce behavioural barriers.

➤ **Contractual perspective**

From this perspective, the pilot validated the OSS principle of offering customers a single contractual interface. End customers were contracted directly by Plenitude through an addendum to their existing electricity supply contract. This simplified onboarding procedures and reduced the transaction costs, demonstrating the advantages of building bundled services on top of established customer relationships. However, the pilot also revealed contractual gaps that are acceptable in a pilot phase but problematic for commercial roll-out. In particular, termination conditions, dispute resolution mechanisms, and responsibilities for equipment de-installation in case of early exit were not fully defined. These elements should be clarified in future OSS Customer Contracts (HoT II) to reduce legal uncertainty and protect both customers and service providers.

➤ **Role allocation and responsibilities between partners**

This turned out to be a critical success factor. Plenitude acted as the main customer interface and data controller, Voltalis was responsible for the flexibility equipment and digital platform, and CONAIF coordinated installation activities through local technicians. This clear division of

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<sup>14</sup> CONAIF - National Confederation of Associations of Energy and Fluids Installation and Maintenance Companies (in Spanish Confederación Nacional de Asociaciones de Empresas Instaladoras y Mantenedoras de Energía y Fluidos)

- tasks facilitated coordination and ensured that customer doubts and potential incidents were handled efficiently. The pilot confirmed the importance of back-to-back contractual arrangements under HoT I to ensure that liabilities related to installation quality, equipment performance, and potential damage to customer premises are clearly assigned to the responsible partner.
- **Operational risk management and customer comfort**  
 Since the installed equipment is owned by Voltalis, responsibility for warranties, failures, and replacement was clearly defined. Customers contacted Plenitude as the single point of contact, while technical resolution was managed by Voltalis. This arrangement worked well in practice and helped to preserve customer trust. However, the pilot showed that comfort restoration procedures and response times should be more explicitly formalised in customer-facing contracts, especially when flexibility actions directly affect household appliances.
- **Data governance**  
 Concerning this issue, the pilot benefited from existing contractual arrangements. Plenitude acted as the data controller, while Voltalis operated as data processor with access limited to consumption and temperature data needed for service delivery. GDPR obligations were largely covered by existing supply contracts, illustrating how OSS models can leverage existing legal frameworks to simplify compliance.

Overall, the Spanish pilot demonstrated that OSS-based bundled energy services are feasible but still need some work to be market-ready at scale. By developing HoT I and II the BungEES approach intends to promote the final step necessary for the large-scale deployment of BungEES OSS. Limited customer awareness, modest economic incentives, and contractual gaps remain key barriers. Future commercialisation will require clearer contractual provisions, stronger customer engagement strategies, and targeted market education efforts to unlock the full potential of flexibility-based services in Spain.

## 6.4 BungEES Pilot in Portugal

The BungEES pilot implemented in Portugal provided relevant lessons on the deployment of bundled energy efficiency and flexibility services in a market where demand response remains at an early stage of development. The pilot was developed by ISR–University of Coimbra (ISR-UC), in cooperation with Voltalis, and was structured around two complementary use cases: a residential pilot based on air-to-water heat pumps and a tertiary-sector pilot in the University of Coimbra building. For the purpose of this section the analysis will be focused on the Portuguese residential pilot, since it is the only Portuguese pilot subject to any type of contractual arrangements. The pilot developed in the University of Coimbra building was developed with inhouse experience and had a different purpose, to show or tertiary sector buildings can also be large sources of flexibility and represent a large untapped potential to scale up flexibility markets. However, to develop this pilot no contract was necessary since no external entities were involved, only ISR staff developed the pilot. The following

considerations, with implication in the creation of guidelines for contractual arrangements are regarding the Portuguese residential pilot.

From a contractual and organisational perspective, the Portuguese experience confirms the validity of the BungEES contractual framework while highlighting specific national constraints and cross-cutting lessons also observed in other pilots.

➤ **Customer onboarding and site selection**

This is particularly relevant in the residential sector. At the time the pilot has developed the Voltalis platform could only manage households equipped with air-to-water heat pumps, a technology that is still quite uncommon in Portugal, where air-to-air systems dominate. As in Czech Republic, this significantly reduced the pool of eligible participants and increased recruitment effort. In addition, physical constraints related to the size of electrical boards were only detected during installation, prevented the deployment in a larger number of apartments. This experience reinforces a cross-country lesson: early technical pre-assessment must be integrated into customer onboarding procedures, and eligibility criteria should be clearly reflected in OSS Customer Contracts (HoT II) and pre-contractual information.

➤ **Contractual implementation perspective**

The Portuguese residential pilot followed a clear separation between partner-level and customer-level responsibilities, consistent with the BungEES Heads of Terms. Despite the fact that the pilot context relied on non-disclosure agreements and pilot participation arrangements rather than a fully commercial OSS Customer Contract, roles were clearly defined in practice. ISR-UC acted as the intermediary and customer interface, while Voltalis provided equipment, installation, digital services, and data management. This mirrors the arrangements observed in France and the Czech Republic and confirms the importance of clear HoT I back-to-back responsibilities, even in pilot stage, to ensure operational clarity and customer trust.

➤ **Role allocation and responsibilities between partners**

Voltalis was responsible for equipment compatibility verification, installation know-how, data collection, and platform operation, while ISR-UC managed customer communication, scheduling, post-installation support, and coordination with certified Portuguese electricians. This division of roles worked effectively but also revealed an important lesson for future commercialisation: OSS models operating across borders must anticipate national certification requirements and integrate local installers contractually under HoT I to avoid delays and compliance risks.

➤ **Customer engagement and comfort**

Although the Portuguese pilot involved a small number of households, participants valued the ability to monitor and control their heat pumps through the Voltalis platform. As observed in France and in the Czech Republic, clear communication about comfort preservation and user control was essential for acceptance. This highlights the need for HoT II contract to explicitly define comfort safeguards, customer override options, and support procedures when flexibility actions affect heating or cooling systems.

➤ **Data governance**

The pilot benefited from a clear allocation of data managing roles and responsibilities. Voltalis managed the operational data and ISR-UC supporting communication and analysis activities. The use of non-disclosure agreements and GDPR-compliant information practices aligned with approaches seen in other BungeES pilots, confirmed that data protection clauses under both HoT I and HoT II must be supported by clear operational processes, even when services are offered free of charge during pilot phases.

➤ **Market readiness challenges**

Limited penetration of compatible technologies, lack of certified installers, and low awareness of demand response are strong constraints for the large-scale deployment of flexibility. These constraints are consistent with lessons from Spain and the Czech Republic and confirm that contractual robustness alone is insufficient. Successful market uptake will require gradual scaling, targeted customer segments, and OSS models capable of adapting HoT I and HoT II to national technical and organisational realities.

Overall, the Portuguese BungeES pilot in the residential sector confirms that the BungeES contractual architecture is flexible and robust, but its effective implementation depends on early technical screening, clear partner coordination, and strong customer communication, all of which are critical for scaling bundled energy services beyond pilot environments

## 7. Recommendations and Conclusions

### 7.1 Overview and strategic implications

This chapter consolidates the main findings of Deliverable D5.3 and translates them into a set of practical recommendations aimed at supporting the large-scale deployment of bundled energy efficiency and flexibility services through One-Stop-Shop (OSS) models. Building on the contractual framework developed in Deliverable D5.2 and in the implementation experience (especially in the BungEES pilots) analysed throughout this report, the recommendations presented here focus on how contractual arrangements can effectively enable, rather than hinder, the market uptake, trust, and scalability.

Evidence gathered from BungEES pilots in Czech Republic, France, Spain and Portugal confirms that the main obstacles to market deployment are not technological barriers. Instead, they result from organisational fragmentation, unclear allocation of responsibilities, limited customer trust, data governance complexity, and high transaction costs associated with customized contractual design and negotiations. These challenges are recurrent across many Member-States, despite differences in regulatory maturity and market structures. The BungEES contractual framework, based on a two-tier architecture (HoT I and HoT II), has proven to be a robust response to these challenges, provided that it is implemented with appropriate operational discipline and supported by clear guidelines.

The following sections of this chapter present different categories of recommendations structured around four complementary levels:

- ✓ Contractual design and structure;
- ✓ Implementation and operationalisation;
- ✓ Market and policy alignment;
- ✓ Long-term scaling and replication.

### 7.2 Recommendations for contractual design and structure

A list of recommendations for contractual design and structure is presented below.

## **Recommendation 1 – Preserve a clear separation between B2B and B2C contracts**

A central lesson from the BungeEES pilots is the importance of maintaining a strict separation between the Bundled Energy Service Master Agreement (HoT I) and the OSS Customer Contract (HoT II). HoT I should absorb complexity related to partner coordination, risk allocation, performance guarantees, and revenue sharing, while HoT II should remain simple, transparent, and customer centric.

In practice, this means avoiding the transfer of operational or technical complexity to the customer contract. End-users should not be required to understand how multiple service providers interact behind the scenes. This separation is essential to reduce behavioural barriers, comply with consumer protection rules, and build trust in OSS models.

## **Recommendation 2 – Standardise contractual cores while allowing modular annexes**

To reduce transaction costs and support replication, the core clauses of HoT I and HoT II should remain standardised across projects and markets. National or service-specific adaptations should be addressed through annexes rather than through modifications to the core contractual logic.

This modular approach enables OSS operators to adapt to different regulatory environments, technologies, or pricing structures without undermining contractual consistency. It also facilitates portfolio-based deployment and supports scaling across multiple regions.

## **Recommendation 3 – Explicitly define exit, substitution, and continuity clauses**

Pilot experience shows that uncertainty around partner exit, substitution, or early customer termination is a major source of risk. HoT I contract should include clear substitution and step-in rights for the OSS operator, while HoT II contracts should define transparent exit conditions for customers, including procedures for equipment removal and data handling.

These clauses are not only legal safeguards, but they are also trust-building instruments. Clear exit rules increase customer willingness to engage with innovative services and reduce perceived lock-in risks.

### [7.3 Recommendations for implementation of contractual arrangements](#)

The following recommendation should be considered for the implementation of contractual arrangements.

## **Recommendation 4 – Translate contracts into operational governance**

Contracts should be designed as legal documents able to adapt to evolving market conditions. OSS operators should systematically and continuously map contractual obligations to internal procedures, responsibilities, and digital tools. Each key clause in HoT I and HoT II should correspond to a clear operational procedure, responsible function, and escalation pathway.

The translation from legal text to operational practice is critical to avoid implementation gaps, particularly in multi-partner settings where misalignment often occurs at interfaces rather than within individual organisations.

## **Recommendation 5 – Reinforce the role of the OSS as single point of accountability**

Across all pilots, customer trust was strongly linked to the existence of a single, clearly identifiable contractual counterpart. OSS operators should fully assume this role, both contractually and operationally. Even when services are delivered by multiple partners, customer support, billing, complaint handling, and communication must be centralised.

This principle must be enforced through back-to-back obligations under HoT I, ensuring that customer-facing commitments can be effectively enforced throughout the value chain.

## **Recommendation 6 – Integrate performance monitoring and AM&V into contracts and operations**

Performance uncertainty remains one of the main barriers to the bundling of energy services. HoT I and HoT II should define performance indicators that are realistic, measurable, and aligned with available data. Implementation should rely as much as possible on Automated Measurement and Verification (AM&V) to improve accuracy, reduce administrative burden and potential disputes. Operational KPIs should be directly linked to contractual KPIs, allowing early detection of deviations and corrective action before contractual thresholds are breached.

## **Recommendation 7 – Prioritise predictable and transparent billing**

Billing complexity is a major source of customer disappointment. OSS models should always provide a single consolidated bill, even when multiple revenue streams or partners are involved. Pricing structures should favour predictability, combining fixed components with clearly explained variable or performance-based elements. Billing systems must be contractually aligned with HoT II and operationally capable of managing revenue allocation under HoT I.

## 7.4 Recommendations for market and policy alignment

The following recommendations are designed for market and policy alignment.

### **Recommendation 8 – Align OSS contracts with consumer protection and data governance requirements**

Strong consumer protection and GDPR compliance are not obstacles to OSS deployment, but prerequisites for trust and legitimacy. HoT II contracts should use plain language, clearly describe data usage, and ensuring easy access to consent management and complaint mechanisms. From an implementation perspective, data protection clauses must be supported by robust digital processes, including clear data ownership mapping, access controls, and cybersecurity procedures.

### **Recommendation 9 – Use pilots and progressive commitment mechanisms to reduce market risk**

The BungEES pilots confirm that progressive commitment mechanisms, such as trial periods (waiver period) or phased deployment, are effective tools to reduce perceived risk for both customers and service providers. The use of progressive commitment mechanisms can also work as an important onboarding tool allowing other customer to be more confident and decide to participate in those projects. Contracts should also allow for pilot phases and controlled scaling, with predefined review points. Such mechanisms are particularly relevant in less mature markets or for customer segments unfamiliar with flexibility-based services.

### **Recommendation 10 – Support regulatory learning through standardised contractual models**

Public authorities and programme managers should recognise the value of standardised OSS contractual frameworks, such as the BungEES HoT I and HoT II, as tools to accelerate capacity building and market learning. Supporting their use through guidance, templates, or voluntary schemes can reduce fragmentation and support policy objectives under the EED and EPBD.

## 7.5 Conclusions and Outlook

The analysis carried throughout this Deliverable D5.3 confirms that contractual arrangements are a decisive enabling factor for the large-scale deployment of integrated energy efficiency, renewable generation and flexibility services. Across the BungEES project, and in particular through the implementation of its pilots in different national contexts, it has become evident

that the main barriers to market uptake are not technological. Instead, they arise from non-technical dimensions such as contractual fragmentation, unclear allocation of roles and liabilities, insufficient operational coordination between actors, and limited customer trust in complex, multi-service offers.

The BungEES contractual framework, based on the two-tier architecture of the Bundled Energy Service Master Agreement (HoT I) and the One-Stop-Shop Customer Contract (HoT II), provides a robust and adaptable response to these challenges. By clearly separating business-to-business coordination from business-to-consumer relationships, this framework allows complexity to be managed at partner level while preserving simplicity, transparency, and consumer protection at customer level. Experience from the BungEES pilots in Czech Republic, France, Portugal and Spain demonstrates that this approach is applicable across diverse regulatory environments and market maturity levels, provided that contracts are implemented consistently and supported by appropriate organisational and digital capabilities.

A central conclusion of this deliverable is that contractual design alone is not sufficient to guarantee successful deployment. Contracts must be operationalised and embedded into day-to-day processes. This includes translating contractual clauses into clear internal procedures, aligning performance commitments with measurement and verification practices, and ensuring that customer-facing communication accurately reflects contractual obligations. Where this alignment was achieved in the pilots, the service delivery proved to be more robust and customer acceptance was higher. In situations where it was weaker, implementation challenges and uncertainty emerged, even when contractual structures robust.

The findings also highlight the importance of trust as a cornerstone of OSS-based business models. Trust is built not only through transparent contract wording, but through predictable billing, responsive customer support, clear exit conditions, and effective management of comfort and performance risks. OSS operators must therefore view contracts as part of a broader trust-building ecosystem that includes communication practices, digital tools, and organisational governance. In this context, HoT II plays a particularly critical role in lowering behavioural barriers and supporting long-term customer engagement.

Looking ahead, as the market evolves, the replication and scaling of One-Stop-Shop models will require coordinated action between the different market actors and policymakers. OSS operators and service providers need to strengthen internal capabilities related to service and asset orchestration, partner coordination, data governance, and regulatory awareness. At the same time, public authorities can facilitate market uptake by promoting standardised contractual frameworks, supporting pilot-to-market transition mechanisms, and ensuring that regulatory frameworks for energy efficiency and demand-side flexibility are coherent and stable.

In conclusion, Deliverable D5.3 provides practical, implementation-oriented guidelines to bridge the gap between contractual innovation and real-world deployment. By demonstrating how the BungEES contractual framework can effectively be implemented across different

contexts, including in cross border contexts, this deliverable contributes to moving integrated energy services beyond isolated pilots toward scalable, consumer-centric, and trustworthy market solutions. These solutions are essential for unlocking the full potential of demand-side energy efficiency and flexibility in order to support of Europe Union long-term energy and climate objectives.

## 8. Annexes

# Annex A1 – Template for Data Collection on the Experience and Lessons Learnt in BungEES Pilots



## Questionnaire – Lessons Learnt on the BungEES Pilots

**Objective:** This questionnaire will be used as an input for BungEES Deliverable *D5.3-Guidelines for Implementation of New Contractual Arrangements*. The goal is to use each partner national pilot experience (not from a technical view, but from the commercial point of view) with the contractual arrangements Defined in Deliverable D5.2.

**Instructions:** Please answer the question bellow in relation to you experience on your national pilot. If the question is “Not Applicable” to your country/pilot just answer “N/A”.

**[HoT1]** question related to the contract that govern partners relationships and operations= the OSS contract

**[HoT2]** question related to the contract that govern the service provider and the end customer relationships and operations.

Nº	Questions	Answers
1	Describe the Client/site selection process	
2	Describe the energy bundle piloted (EV / HP / storage / DR..)	
3	Who contracts the end customer? <b>[HoT2]</b>	
4	If multiple partners touched the journey, how were responsibilities split (pilot acquisition, customer onboarding, installation,	

	commissioning, after commissioning support? <b>[HoT1]</b>	
5	Did the client sign any type of agreement with BungEES partner? <b>[HoT2]</b>  If yes, attach the template	
6	If yes, does it clearly assign: onboarding, communication, after-sales support and termination conditions? <b>[HoT2]</b>	
7	Does the agreement with partner contract include incident response plan, liability and remedies?	
8	Does this contract states who is responsible for potential damage to the customer house/facility if caused by the pilot during the installation, commissioning or operation (damage liability)? <b>[HoT2]</b>	
9	Does this contract states who is responsible if the customer complains that is comfort conditions and appliance operation is affect? And does it also stats who is responsible for restoring comfort and appliance regular operation? <b>[HoT2]</b>	
10	Does this agreement or contract clearly state, who is responsible for de-installation on exit of the equipment / electrical installation if the customer is not happy with the pilot and wants to terminate the agreement or contract? <b>[HoT2]</b>	
11	Does the contract with end customer state the conditions for termination and the dispute path? <b>[HoT2]</b>	
12	Does the contract with the partner state the conditions for termination the dispute path? <b>[HoT 1]</b>	

13	If no agreement or contract was signed who is responsible for topics mentioned in questions 4 to 12 ?	
14	In your country pilot, what contractual safeguards addressed the compliance risks (e.g. use of non-disclosure agreements, personal data protection, access and control to pilot data and compliance with GDPR, etc.)? <b>[HoT2]</b>	
15	In your country pilot, what contractual safeguards addressed the compliance risks (e.g. use of non-disclosure agreements, personal data protection, access and control to pilot data and compliance with GDPR, etc.)? <b>[HoT1]</b>	
16	In your country pilot, what contractual safeguards addressed financial and settlement risks (e.g., costs arising from customer losses due to damage or poor performance), and how were they triggered, evidenced, and settled? <b>[HoT1]</b>	
17	In your country pilot, what contractual safeguards addressed financial and settlement risks (e.g., costs arising from customer losses due to damage or poor performance), and how were they triggered, evidenced, and settled? <b>[HoT1]</b>	
18	In your country pilot, what contractual safeguards were in place to handle operational failures (e.g., equipment faults, control issues, or outages causing loss of comfort or appliance use), and how were they triggered and enforced?" <b>[HoT2]</b>	

19	In your country pilot, what contractual safeguards were in place to handle operational failures (e.g., equipment faults, control issues, or outages causing loss of comfort or appliance use), and how were they triggered and enforced?" <b>[HoT1]</b>	
20	Was coordination or notification with DSO/utility/ energy supplier or other relevant stockholders required?	
21	Please describe challenges, top non-technical issues across the journey (pilot or customer selection / operation/ after-sales, troubleshooting) ..... ? <b>[Both contracts HoT1 and HoT2]</b>  Please describe the lessons learnt in your country pilot. What to change before commercialisation?	
22	Are there plans to expand your pilot? if yes what are the scaling triggers (KPI/volume/quality thresholds/ market conditions, etc.?)	
23	Data roles: who has access to the pilot data and for what purposes? Who is controller and processor for customer personal data?	
24	When is a site is considered "connected and working"? (device online / control verified. ..? ( acceptance definition)	

# Annex A2 – Head of Terms I

## Bundled Energy Service Master Framework

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### I. Introduction

As part of the BungeES project, this document presents the heads of terms for three types of potential contracts: lead generation contract, partnership contract, and service provider contract. It is important to note that the Clean Energy Package does not clearly define the nature of the relationship between electricity suppliers and aggregators. Therefore, within the framework of the BungeES project, we propose to study all types of contracts to be considered.

### II. Partnership types and parties

There are 3 types of partnerships detailed in this document: lead generation, partnership, and service provider contracts. For each section below, the specific characteristics and requirements of these three contractual relationships are described in detail, allowing for a clear understanding of their respective terms and conditions.

### III. Head of Term

#### **1 MODEL 1: Service provider**

##### 1.1 PURPOSE OF AGREEMENT

Commercial Partner offers DSR Aggregator to end users as part of a one stop shop offer.

##### 1.2 SERVICES

Connection to DSR Aggregator technology giving end users the opportunity to reduce/monitor energy consumption.

##### 1.3 FINANCIALS

Commercial Partner pays DSR aggregator for service. This may be one off or ongoing. Payments could be per connected installations as one off or ongoing.  
Fees per connection could be reduced as volumes increase.

##### 1.4 END CLIENTS

DSR aggregator services would be offered to existing and new clients. Parties would collaborate on marketing materials.

contracts would be:

- a) DSR aggregator and Commercial Partner as per these heads of terms
- b) between Commercial Partner and end user

Contractual relationships under 2 would end when contract 1 ends

### 1.5 TERRITORY

Spain (or a region of Spain) with the opportunity for roll out to other EU countries.  
Territory to be as limited as possible, especially in the first instance

### 1.6 START DATE/DURATION/TERMINATION

Initial pilot phase of one year, then automatically renewed yearly.  
Standard termination provisions  
Termination by DSR aggregator:  
if sales thresholds are not met (especially if there is some exclusivity)

## **2 MODEL 2: Partnership**

### 2.1 PURPOSE OF AGREEMENT

Introduction of Commercial Partner's clients to DSR aggregator Services.  
End client has the opportunity to opt out/opt in of different services

### 2.2 FINANCIALS

Each party will meet their costs in fulfilling the contract other than as below.  
DSR aggregator services will be provided to the end client for no cost. Such cost may be split between DSR aggregator and Commercial Partner.  
The consideration will be the opportunity for DSR aggregator to use the end client consumption data. If costs of installation have been split, then exploitation of data will be split. The split need not be 50/50.  
Consideration for Commercial Partner will be an opportunity to offer a service to its customers.

### 2.3 END CLIENTS

DSR aggregator services will be offered existing and to all new clients  
Contract will provide mechanisms so that DSR aggregator may seek consents from end users if needed and the client may have the option to continue with DSR aggregator when/ if they terminate their contract with Commercial Partner.

### 2.4 TERRITORY

Spain and any subsequent EU roll out.

## **3 MODEL 3: LEAD GENERATION**

### 3.1 PURPOSE OF AGREEMENT

Commercial Partner introduces end clients to DSR aggregator for a fee  
DSR aggregator provides its Services to end client  
DSR aggregator may use and trade aggregated data

### 3.2 FINANCIALS

The contract will provide a consideration paid to Commercial Partner for introducing clients to DSR aggregator services. The consideration may be structured with targets or with thresholds to be met. Thresholds could be in relation to number of connected installations. Payments could be per connected installations as one off or ongoing.  
To mitigate costs, DSR aggregator may charge end users for DSR aggregator services.

### 3.3 VOLTALIS SERVICES

Connection to DSR aggregator technology giving end users the opportunity to reduce/monitor energy consumption. However, services may grow and evolve.

### 3.4 END CLIENTS

End clients will be clients of DSR aggregator company.

The contractual relationship between DSR aggregator and end user may survive termination of contractual relationship between DSR aggregator and Commercial Partner

DSR aggregator services will be offered existing and new clients of Commercial Partner, using marketing materials produced jointly.

### 3.5 TERRITORY

Spain and subsequent roll out to other EU countries

## IV. Appendices: Example for each type of contract

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### 4.1 DEFINITION

#### **Lead generation**

4.1.1 Qualified Lead: Qualified lead refers to an existing or a potential new customer taking on the DSR solution (including hardware, or API or other communication protocol)

4.1.2 DSR Technology: Any hardware, software, metering devices, and systems provided or developed by the DSR technology provider, including but not limited to the VPP, hardware, and associated infrastructure.

4.1.3 VPP (Virtual Power Plant): The Software platform developed and owned by DSR Aggregator to aggregate and manage energy resources across multiple sites.

4.1.4 Demand Side Response (DSR): The process by which customers' energy consumption is adjusted or reduced to provide DSR volumes on power markets.

4.1.5 Installed Site: A site (household or commercial) shall be considered "Installed" when:

a/ the DSR has been successfully installed, activated, and commissioned at the premises, enabling its participation on the Virtual Power Plant (VPP) and Demand Side Response (DSR) services.

b/ An API has been successfully implemented between the appliance's manufacturer and the DSR aggregator, enabling the sites' appliances participation on the Virtual Power Plant (VPP) and Demand Side Response (DSR) services.

4.1.6 DSR CRM System: The proprietary Customer Relationship Management (CRM) platform operated by the DSR aggregator to track, manage, and maintain interactions with leads, customers, and partner companies. The CRM System ensures accurate recording of leads generated, monitoring of lead status, validation of installed households, and compliance with data privacy regulations.

4.1.7 Customer relationship: The DSR technology provider and aggregator maintain and keep the customer relationship.

#### **Partnership**

4.1.8 Branding: This refers to all DSR aggregator services that are marketed; under the Commercial Partner's brand when white labelling or under both Partners' brand when co-branding. This approach allows the Commercial Partner to offer the DSR solutions while maintaining their brand identity with their customers.

4.1.9 DSR Technology: This definition refers to all the technical elements mentioned previously, with an important feature: the ability to adapt and customize DSR solutions according to the Partner's specific needs.

4.1.10 Contractual Territory: This term designates the precise geographical area where the Partnership is active and operational. This clear delimitation prevents any overlap of activities and ensures optimal market coverage.

4.1.11 Customer relationship: Both Partners maintain and maintain the customer relationship.

***Service Provider:***

4.1.12 Technical Services: These services refer to all essential technical services: initial installation of DSR equipment, regular maintenance, and continuous technical support to ensure proper operation.

4.1.13 Service Levels: These commitments precisely define the Service Provider's quality standards and response times. They constitute a service guarantee to ensure the satisfaction of partners and end users.

4.2 SCOPE OF SERVICES

***Lead generation***

The parties are Lead Generator and DSR Provider.

4.2.1. Lead Generation Responsibilities: The Lead Generator shall be responsible for identifying and generating Qualified Leads for DSR technology installations, the Lead Generator acknowledges that they shall specifically target sectors agreed upon by both Parties.

4.2.2. Lead Submission and Verification: All leads must be submitted to DSR Provider for qualification. A lead shall only be considered a Qualified Lead if it meets the defined eligibility criteria and results in the successful installation and activation of the DSR Technology.

4.2.3. Compliance with Customer Agreement: The Lead Generator acknowledges that all customers generated under the agreement between the parties shall be subject to DSR Provider's Customer Agreement. The Lead Generator shall ensure that all potential leads are aware of and willing to enter into the Customer Agreement before submission.

4.2.4 Exclusive Rights: Lead Generator [will / will not] serve as the exclusive provider of lead generation services within the defined territory and market segment.

***Partnership***

The parties (together, refers to as Partners) are the Commercial Partner and the DSR Aggregator.

4.2.5. Partner Responsibilities: The Commercial Partner will oversee service commercialization and provide first-level customer support. These activities include promoting solutions and managing initial customer inquiries.

4.2.6. DSR Aggregator Responsibilities: The DSR Aggregator handles the technical aspect by providing specialized support and ensuring continuous maintenance of applications, thus guaranteeing the proper functioning of the entire system.

***Service Provider***

The parties are: Commercial Client and Service Provider

4.2.7. Installation: Installation services include equipment supply, on-site deployment, and complete system commissioning. This phase is crucial to ensure the initial proper functioning of the solutions

4.2.8. Maintenance: Preventive and corrective interventions

4.3 RENUMERATION AND TERMS PAYMENT

***Lead generation***

#### 4.3.1. Payment Structure:

B2B2C Leads: The Lead Generator shall receive payment upon successful installations.

B2B Leads: The Lead Generator shall receive payment upon successful installations and/or commissioned onto the DSR Provider VPP platform.

#### 4.3.2. Payment Conditions:

Payments shall be made only upon confirmation by DSR Provider VPP that the lead has resulted in fully operational installation.

Payments shall be made on a regular basis

### ***Partnership***

#### 4.3.3 Revenue sharing on marketed services

A revenue sharing system will be established for marketed services, allowing for an equitable distribution of benefits generated through the sale and use of DSR Aggregator services.

#### 4.3.4 Commission on energy savings achieved

A commission will be paid based on achieved KPIs, creating a direct incentive to optimize the energy efficiency of installations.

### ***Service Provider***

#### 4.3.5 Fixed-rate pricing per intervention

A fixed rate will be applied for each technical intervention, providing transparency and predictability of costs for services rendered.

#### 4.3.6 Quality target bonuses

Bonuses will be awarded when quality targets are met, encouraging the maintenance of high service and performance levels.

#### 4.3.7 Invoicing

Regular invoicing with agreed payment terms, establishing a clear framework for financial management.

## 4.4 REPORTING AND VERIFICATION

### ***Lead generation***

#### 4.4.1 Regular Reporting Obligations:

The Lead Generator shall, at the conclusion of each quarter, provide the DSR Provider with a report detailing the total number of Qualified Leads, along with supporting documentation to substantiate Qualified Leads.

4.4.2 DSR Provider will review and certify the report to ensure accuracy before payments are made to the Lead Generator based on the agreed payment structure

#### 4.4.3 Audit and Verification:

DSR Provider shall reserve the right to audit the Lead Generator's records pertinent to Qualified Leads to authenticate the accuracy of reported installed capacities and corresponding remuneration calculations. Such audits shall be conducted at DSR Provider discretion as deemed necessary.

#### 4.4.4 API Integration Reporting:

For API-enabled installations, the Lead Generator shall provide detailed reporting on successful API implementations between appliance manufacturers and the DSR aggregator, including the number of connected devices and their operational status.

### ***Partnership***

#### 4.4.5 Regular report on joint commercial activity

These reports will track all commercial activities conducted jointly by DSR Provider and the Partner. It provides a clear view of the collaboration and results achieved.

#### 4.4.6 Monitoring of revenue generated by joint services

Tracking of revenue generated by white co-branded or labelling services, which are marketed under the partner's brand while using DSR technology.

#### 4.4.7 Quarterly performance targets evaluation

A regular evaluation of performance targets that measures the achievement of set objectives.

#### 4.4.8 API Performance Monitoring:

Regular monitoring and reporting of API integration performance, including uptime, response times, and successful communication rates between connected devices and the DSR platform

### ***Service provider***

#### 4.4.9 Weekly report on technical interventions

A regular report detailing all technical interventions performed, ensuring precise monitoring of maintenance and installation operations.

#### 4.4.10 Monitoring of interventions and incidents

Continuous monitoring of interventions and incidents and reporting to the Partner to ensure service quality and quickly identify potential problems.

#### 4.4.11 Quality control of installations by DSR Provider

Quality control of completed installations, ensuring that all installations meet the required technical standards.

#### 4.4.12 API Integration Quality Assurance:

Regular verification of API integration quality, including testing of communication protocols, data accuracy, and system compatibility between manufacturer devices and the DSR platform

## 4.5 DATA PRIVACY AND COMPLIANCE

### ***Lead generation***

4.5.1 GDPR Compliance: All parties shall handle all personal data in compliance with GDPR and applicable privacy laws.

4.5.2 Data Ownership: All lead data collected under this Agreement shall be the exclusive property of DSR Provider. The Lead Generator shall not use, sell, or disclose such data without DSR Provider's prior written consent.

### ***Partnership***

4.5.3 GDPR Compliance: Both companies shall handle all personal data in compliance with GDPR and applicable privacy laws.

4.5.4 Joint responsibility for data processing:

Both companies jointly assume responsibility for data processing, involving close coordination in the management, protection, and use of customer information. This shared responsibility requires a clear definition of each party's roles and obligations.

4.5.5 Joint data protection procedures:

Common data protection procedures have been established to ensure a consistent and secure approach. These procedures cover the entire data lifecycle, from collection to deletion.

### ***Service provider***

4.5.6 Limited access to technical data for Partner:

Access to technical data for Partner is strictly limited to information necessary for the execution of agreed services. This restriction ensures the protection of sensitive information while enabling effective collaboration.

## 4.6 CONFIDENTIALITY

Note: The following terms and conditions apply identically to all three types of contracts (Lead Generation, Partnership, and Service Provider) – Except 5.6.1 see the note below

***A: Lead generation***

4.6.1. Non-Disclosure: Both Parties agree to keep all confidential information exchanged under their agreement strictly confidential and not disclose it to third parties without prior written consent.

Note: Lead Generation contracts specifically, information about load shedding events will not be communicated to the Partner.

4.6.2. Publicity: The DSR Provider and Commercial Partner shall not use the other’s name, branding, or marketing materials without prior written approval.

4.6.3 Confidential Information: Each party undertakes to keep confidential all proprietary, non-public information exchanged under their agreement which includes but is not limited to customer lists, pricing data, and technical specifications and load shedding data.

**4.7 TERM AND TERMINATION**

Note: The following terms and conditions apply identically to all three types of contracts (Lead Generation, Partnership, and Service Provider)

4.7.1 Term of Agreement: The agreement shall become effective as of the date of signing a binding contract and continue for an agreed period unless terminated earlier. However, the parties will agree that their agreement will be subject to a review at specific anniversary dates. Agreement may be reviewed in response to market conditions, performance metrics, or changes in strategic objectives.

4.7.2 Termination for Convenience: Either party may terminate their agreement by giving an agreed written notice.

4.7.3 Post-Termination Obligations: Upon termination, outstanding fees owed prior to the termination date will be paid. Certain conditions relating to confidentiality and data will continue.

4.7.4 Customer relationship: Upon termination, the customer relationship is handed over (or not) according to contract terms.

**4.8 LIMITATION OF LIABILITY**

Note: The following terms and conditions apply identically to all three types of contracts (Lead Generation, Partnership, and Service Provider)

Limitation of Damages: DSR Provider’s liability will be limited to direct damages resulting from its obligations under the chosen agreement. Under no circumstances shall DSR Provider be liable for indirect, special, or consequential damages.

**4.9 DISPUTE RESOLUTION**

Note: The following terms and conditions apply identically to all three types of contracts (Lead Generation, Partnership, and Service Provider)

Resolution of Disputes: In the event of any disagreement arising from their agreement, both parties will agree to pursue amicable resolution through negotiation, failing which disputes may proceed to mediation or arbitration. Both parties shall bear costs equally, except as otherwise determined.

**4.10 INTELLECTUAL PROPERTY RIGHTS**

Note: The following terms and conditions apply identically to all three types of contracts (Lead Generation, Partnership, and Service Provider)

Ownership of Intellectual Property: IP can be shared or not, depending on type of partnership and contractual clauses. However, each party shall maintain ownership of its IP throughout the agreement.

4.11 GOVERNING LAW

Note: The following terms and conditions apply identically to all three types of contracts (Lead Generation, Partnership, and Service Provider)

Jurisdiction: The agreement shall be governed by and construed in accordance with the laws of a European country where one of the parties is based.

## Annex A3 – Head of Terms II

### Service Provision Contract for Integrated Energy Service Package (OSS-Customer Contract)

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In \_\_\_\_\_ one of \_\_\_\_\_ of 20

#### Gathered

On one side, (\_\_\_\_), domiciled in (\_\_\_\_) and NIF (\_\_\_\_), registered in the Mercantile Registry of (\_\_\_\_), represented by (\_\_\_\_), of legal age, with DNI (\_\_\_\_), in their capacity as (\_\_\_\_), with the powers conferred on her by the deed of power of attorney by the Notary of (\_\_\_\_) D./Mrs. (\_\_\_\_), on date (\_\_\_\_) (hereinafter, "The Provider").

On the other hand, [client Name] \_\_\_\_\_,  
domiciled at \_\_\_\_\_  
and NIF \_\_\_\_\_ (hereinafter, the "End Customer").

Hereinafter, the Provider and the End Customer will be jointly referred to as the "Parties" and individually as a "Party".

#### Exposed

- I. The Provider is a company that professionally helps, maintenance and, in general, value-added services (hereinafter, the "Products and Services") and is duly authorised to carry out the activities.
- II. The End Customer is a natural person/self-employed entrepreneur/company that is interested in receiving the provision of the Products and Services of the Provider, being legally qualified to sign this Contract without any legal contradiction that allows it in accordance with the applicable regulations<sup>15</sup>.
- III. In view of the above, the Parties, mutually recognizing, in the respective capacities in which they act, sufficient legal capacity to contract and bind each other, formalize this contract, which is made up of General Conditions and Specific Conditions (hereinafter, the "Contract") based on the following:

#### CLAUSES

##### 1. OBJECT

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<sup>15</sup> In this clause “applicable regulation” should be adapted in accordance with local legislation.

1.1. The purpose of this Contract is to regulate the terms and conditions under which the Provider undertakes to provide the End Customer with the Products and Services detailed in the Annex (\_\_\_\_)<sup>16</sup>, in accordance with the provisions of said Annex and the conditions of this Contract.

In general, the Products and Services will consist of:

- Technical assistance in the CLIENT's energy installations.
- Preventive and/or corrective maintenance of electrical, thermal, or other equipment detailed in the Annex attached to the contract.
- Value-added services, such as consumption monitoring, energy efficiency, savings proposals, etc.

The Products and Services to be developed by the Provider will be at the following address:

[(\_\_\_\_ )<sup>17</sup>

## **2. NON-EXCLUSIVITY**

2.1 The Provider may provide the Products and Services to other End Customers, so it is not exclusively linked to the End Customer signing this Contract.

2.2 Similarly, the End Customer may contract with another Provider other products like those set forth herein in everything that the Provider is not helping in accordance with the provisions of the Annex attached to the contract.

## **3. INDEPENDENCE OF THE PARTIES<sup>18</sup>**

Both companies are independent of each other without any corporate relationship between them, nor do they share shareholders or management teams or administrators, nor is the generation of a corporate relationship between the Parties, nor of association, agency, branch, or representation.

In addition, the End Customer manages its own resources and has full capacity when it comes to hiring workers or deciding on its selection strategies. In no case does the End Client use the material means of the principal, nor is it subject to the supervision of the principal.

Therefore, no relationship or employment relationship arises between the Parties, nor between the End Client and the personnel assigned by the End Client to provide the services described in the object of the Contract.

To this end, the Parties expressly state that the personnel assigned to the provision of the services by the End Client act under the instructions and directives of the End Client, without the Provider being involved in the management of the personnel.

## **4. DURATION OF THE CONTRACT AND ACCEPTANCE**

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<sup>16</sup> Annexes should be developed by the service provider according to the service and product.

<sup>17</sup> The signatory must fill in the address where the services are to be provided.

<sup>18</sup> This clause should only be added if the end customer is not a natural person.

Unless a different duration is provided in the Annexes, this Contract will have a duration of one year, and will be tacitly extended for annual periods, unless denounced by either party at least one month prior to the date on which it is to be terminated, without prejudice to the provisions of Clause 5 below.

Prior to the entry into force of this Contract, the Provider may consult files with information on financial solvency and credit, as well as the End Customer insolvency situation. The Provider reserves the right to obtain solvency data of objective criteria, being fully eligible by the Provider whether to proceed with the acceptance of the Contract or not.

In contracts concluded at a distance, the End Customer may sign this Contract by means of a recognized electronic signature. By signing this Contract, the Client consents to the use of the recognized electronic signature in all its contractual relations with the Provider. In any case, the signature must comply with the provisions of REGULATION (EU) No 910/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL, of 23 July 2014, on electronic signature, as well as the provisions of the local legislation.

This Contract will enter into force on the date of its signature.

## **5. REMUNERATION**

### **5.1. Service price**

The price of the Service will be detailed in the Annex (\_\_\_\_) attached to the contract.

The fees mentioned do not include VAT<sup>19</sup>, nor the expenses incurred for the provision of the Service by The Provider that are excluded or exceed what is agreed between the Parties in Annex (\_\_) attached to the contract, such as travel, accommodation, meals, excess budget in parts or other similar expenses.

The extra costs must be assumed by the Provider in accordance with this Contract will only be paid by the End Customer when they meet the following requirements:

- They have been previously authorized by the End Customer according to a separate budget, which will form an integral part of this Contract.

### **5.2. Accrual**

The Provider will be billed to the End Customer monthly and will be charged by direct debit 14 days from the date of issue of the invoice.

For the authorisation by the End Customer of the Direct Debit, the End Customer will sign the corresponding SEPA mandate, which will form an integral part of this Contract.

If the agreed period elapsed without the payment having been made, the Provider will have the right, without the need for prior notice, to increase the overdue debt with a default interest resulting from applying the legal interest rate of money plus a defined<sup>20</sup> percentage points.

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<sup>19</sup> The signatories must take into consideration others applicable taxes in accordance with local legislation.

<sup>20</sup> The amount should be defined and stated in the contract

If the End Customer, in a justified manner and in good faith, considers that the invoice issued by the Provider is not correct, it must notify it including the reasons and amount of the discrepancy and will proceed to the payment, within the terms determined in the invoice, of the amount not disputed.

If there are credit and debit balances at the same time between the Parties, it is expressly recognized that such credits and debts may be offset against each other.

## **6. OBLIGATIONS OF THE PROVIDER**

The Provider, in accordance with the provisions of this Contract and the Annexes that comprise it, undertakes to:

- Execute the services in accordance with the deadlines and specifications stipulated in the Annex attached to the contract.
- Execute the services in accordance with current technical and safety regulations.
- Have qualified and sufficient personnel for the provision of the services.
- Inform the End Customer of relevant incidents or recommended improvements in the place of provision of the Products and Services.

The following will not be the object of this Contract<sup>21</sup>:

- Inspections, assistance, or repairs carried out by personnel other than the Provider in relation to the Equipment.
- The repair of breakdowns in those elements that are owned by companies other than the Provider or those that are owned by the Client and that are not included in the Annex attached to the contract, as well as the incorrect operation of elements owned by companies outside the Provider.
- The correction of defects or breakdowns arising from the electrical installations owned by the Client unless they are included in the provision of the Products and Services in accordance with the Annex attached to the contract.
- The repair of damage or breakdowns derived from the location of the Equipment, its improper, negligent, or improper handling or use by the End Customer or by a third party that has not been designated by the Provider.
- Aesthetic improvements requested by the Client with respect to the installation that are not linked to its correct operation. Any aesthetic improvement will be considered any embellishing structures of the components, hiding wiring of the installation, installation of the components in preferential places, request for specific brands or materials, request for preferential interventions, request for specific lifting material, etc.

## **7. OBLIGATIONS OF THE END CUSTOMER**

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<sup>21</sup> The activities excluded from the scope of the contract are provided for illustrative purposes only. They must be reviewed and adjusted according to the products ultimately developed by the business.

The End Customer, in accordance with the provisions of this Contract and the Annexes that compose it, undertakes to:

- Allow access to the facilities indicated in Clause 1 to provide the Products and Services that are the subject of this Contract.
- Provide the necessary information and documentation required by the Provider for an adequate service.
- Pay the agreed amounts within the established deadlines.

## **8. TERMINATION OF THE CONTRACT**

8.1. This Contract will be terminated at any time, by mutual Contract of the Parties, and upon expiration of the term provided for its validity.

8.2. In addition to the causes provided for by law, any breach of the obligations assumed by the Parties in this Contract will be cause for termination. In such a case, neither Party will be subject to the payment of any penalty.

8.3. Likewise, either Party may terminate the Contract with at least one (1) months' notice. If the End Customer terminates the Contract early without justified cause in accordance with this provision, it will be subject to the payment of the penalty set out in Clause 9.

8.3. Specifically, by way of example and not limitation, The Provider may immediately terminate the Contract by:

- Impossibility of access to the Facility subject to the provision of the Products and Services for reasons attributable to the End Customer.
- Refusal by the End Customer to provide the information or documentation required by the Provider.
- Failure to pay the agreed amounts in the amount of 2 (two) monthly instalments<sup>22</sup>.

## **9. PENALTIES<sup>23</sup>**

In the event of unilateral termination by the End Customer not justified by the breach of contract by the Provider, the End Customer must pay the outstanding fees until the end of the current contractual period, corresponding to the Products and Services contracted in accordance with the Annex attached to the contract.

## **10. ASSIGNMENT**

10.1. The relationships and rights derived from this Contract are of a very personal nature, so the End Customer may not assign, or transfer, under any legal title the rights and obligations derived from this Contract, nor be replaced by a third party in them, without the express, prior and written authorization of The Provider.

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<sup>22</sup> The indicated period should be defined and valued by business

<sup>23</sup> The penalties should be defined and valued by business

10.2. Any total or partial assignment without consent will cause the automatic termination of the Contract and the provisions of Clause 9 will apply.

10.3. The Provider may, however, assign its contractual position to another entity that provides the Products and Services under the same conditions as the Provider.

## **11. RIGHT OF WITHDRAWAL**

Within fourteen calendar days from the signing of this Contract, the Client may cancel the effects of this Contract, by sending the Provider the specific withdrawal document for this purpose.

## **12. SUBCONTRACTING**

The Provider may subcontract, in whole or in part, with third parties, who have all the required authorisations, the execution of the corresponding Products and Services without the need for any authorisation from the End Client.

## **13. DATA PROTECTION**

13.1. This Privacy Policy informs about the processing of personal data collected by the data controller (as defined below), as required by law, including the provisions of the European Union's General Data Protection Regulation ('GDPR'). Personal data will be controlled and processed by the data controller in accordance with the terms of this Privacy Policy.

### **1. Responsible for the processing of personal data:**

DATA CONTROLLER: (\_\_\_\_\_) (hereinafter referred to as the Provider)

CIF: (\_\_\_\_\_)

CONTACT ADDRESS: (\_\_\_\_\_)

DATA PROTECTION OFFICER: (\_\_\_\_\_)

### **2. Purposes and legitimacy of the processing of personal data:**

The personal data provided by the End Customer at the time of contracting and pre-contracting, as well as the personal data that subsequently derived from contractual relations, will be incorporated into the "Customers" processing activity.

**A. Management of the Provider's products and services,** End Customer's personal data is used for the management of the products and services contracted, which includes attention to queries, informative communications, invoicing, advice on contracting processes.

The legitimacy for the processing of personal data is the execution of the contract.

**B. Management of pre-contractual relationships:** The Provider processes the personal data of POTENTIAL CUSTOMERS for the purpose of providing, managing, controlling, and maintaining the pre-contractual relationships requested by the latter. In certain contracts with the Provider.

The legitimacy for the processing of data is the application of pre-contractual measures.

### **C. Management of queries or suggestions that users may make through web forms.**

The legitimacy for the processing of personal data is consent.

**D. Call recording:** The Provider makes recordings of calls with the End Customer in order to provide, manage, control and maintain pre-contractual and contractual relationships, in the event that it is necessary, the Provider may use these recordings to deal with possible actions or claims that may be undertaken.

The legitimacy for the processing of data is the execution of the contract and for the satisfaction of the legitimate interest in maintaining the quality of the service and keeping a record of these to verify the integrity of these calls.

**E. Consultation of information files on financial solvency and credit:** The Provider processes the End Customer's data for the purpose of carrying out financial risk analysis of the End Customer and comparing their economic solvency data, in full compliance with the applicable regulations.

In the same way, and subject to current regulations, the customer is informed that failure to comply with the obligations to pay for the energy supply assumed under the contract may lead to the inclusion of their personal data in a solvency and credit file as established in clause 4.

Legitimacy for the satisfaction of the Provider's legitimate interest to the extent that it is necessary to know the economic capacity of an End Customer. In this sense, data protection regulations do provide for the inclusion and consultation of companies to this type of file.

#### **F. Compliance with legal obligations imposed.**

The Provider processes the End Customer's data to comply with the accounting, legal, tax and administrative obligations associated with contractual relations.

Legitimacy for data processing in compliance with a legal obligation.

Lawfulness of the Processing: Legitimacy for the execution of the contract and for compliance with a legal obligation.

#### **G. Commercial and Marketing Purposes**

Provided that the customer has given their consent for the following purposes in addition to the activity of the data controller:

-Market research, economic analysis, statistics and where appropriate, profiling to develop automated individual decisions.

-Marketing of the services of the data controller and/or a third party, sending advertising/information/promotional material and participating in initiatives and offers aimed at rewarding the data controller's customers.

-Surveys of the degree of customer satisfaction with the quality of the services provided.

These activities may relate to the Provider's products and services as well as those of its business partners and may also be carried out through an automated call service, without the intervention of an operator, including email.

Consent to this data processing and communication to these indicated subjects is optional and can be revoked at any time by contacting customer service, or at the email address (\_\_\_\_\_).

#### **3. Periods or Criteria for the retention of personal data.**

The personal data to which access is obtained will be processed for the duration of the contractual relationship. In this sense, the Provider will keep the personal data once the contractual relationship has ended, duly blocked, during the limitation period of the actions that may arise from the relationship maintained with the interested party.

Finally, and only if you have consented to their processing, the Provider will process your personal data once the contractual relationship has ended to re-offer you products, services, or promotions in the energy solutions sector, for 5 years.

#### **4. Recipients of personal data**

The personal data processed to achieve the purposes detailed above may be communicated to ensure the correct development of the contractual relationship, as well as to comply with legal obligations imposed on the Provider and will be in relation to the following Companies and Public Bodies:

-Suppliers to whom the Provider contracts part of the services, to comply with the contractual relationship with the Client, such as companies specialized in credit recovery.

-In the event that the Client has consented, the Provider will communicate Client data to third-party partner companies or collaborators.

-Competent Public Administrations, Courts and Tribunals, and Data Protection Authorities, to comply with the applicable legal obligations.

#### **5. Customer's Rights**

The End Customer may exercise, at any time, their rights of access, rectification, deletion, opposition, limitation of their processing and portability of their personal data, when applicable, by sending an email to (\_\_\_\_) attaching a copy of their DNI, NIE, passport or equivalent document. The Provider will process your request within the legally established period of one month from receipt of the request. This period may be extended by a further two months if necessary, considering the complexity and number of applications.

The interested party may withdraw their consent granted at any time, opposing the processing of their data if they have granted it for a specific purpose, being able to modify their preferences at any time.

The End Customer, especially when they have not obtained satisfaction in the exercise of their rights, may file a complaint regarding data protection authority and regulations in applications<sup>24</sup>.

The End Customer has been informed of the Provider's Privacy and Data Protection Policy, and grants their consent for the purposes indicated below:

In (\_\_\_\_) to (\_\_\_\_) of (\_\_\_\_) of (\_\_\_\_).

Customer:

NIF/CIF:

Signature:

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<sup>24</sup> National data protection authority and the regulations in application should be identified according of the respective country.

The End Customer declares to have read the information on the processing of personal data, contained in Clause 13 of the General Terms and Conditions of Contract. By ticking the following boxes, the Client may freely decide whether to give consent to the Provider for the following purposes:

- I agree to receive promotions, sweepstakes, and news on products and services from the Provider.
- I accept that the Provider or third-party Collaborators may, where appropriate, carry out a market analysis based on my profile, to draw up automated individual decisions that fit it.
- I agree to receive promotions, advertising and news on products and services from third party collaborators of the Provider, related to my supply contract or for services related to it.

#### **14. COMMUNICATIONS**

14.1. The Parties establish that communications made through any means at the following addresses, in addition to those made through the portal owned by The Provider, will be valid:

THE PROVIDER:

- i. Contact Person: (\_\_\_\_\_)
- ii. Email: (\_\_\_\_\_)
- iii. Postal address: (\_\_\_\_\_)

THE END CUSTOMER:

- i. Contact person: (\_\_\_\_\_)
- ii. Email: (\_\_\_\_\_)
- iii. Postal address: (\_\_\_\_\_)

Notices made under this Contract shall be deemed to have been given on the date of receipt by the addressee or on the date on which such service is attempted at the address indicated for that purpose.

14.2. The change of any of the domiciles of the Parties shall not be deemed to have occurred, nor shall it produce any effect in relation to this Contract, until the new domicile has been reliably notified to the other Party and fifteen (15) days have elapsed since the reliable notification.

#### **15.- FORCE MAJEURE**

If, due to "Force Majeure" (force majeure being understood as the cases set out in the applicable national legal order of each country), the Provider considers that it is not possible to comply with the obligations established throughout this Contract and Annexes, the Provider must notify the End Customer as soon as possible, the incidents that in its opinion constitute Force Majeure.

The party affected by Force Majeure must take all reasonable measures within its reach to minimize the impact that the effects of Force Majeure could generate on the fulfilment of its obligations derived from this Contract. If the affected party does not take all the measures within its reach, it will be liable to the other, understood as a breach of the Contract and the complying party may also immediately terminate the Contract and claim damages from the other party.

**16.- LEGISLATION AND JURISDICTION**

16.1. This Contract is subject to law (\_\_\_\_\_)<sup>25</sup>.

16.2. The Courts of (\_\_\_\_\_)<sup>26</sup> shall be competent to hear all actions arising from this Contract.

And as proof of conformity, the Parties sign this Contract at the place and date indicated in the heading.

The Provider

The End Customer

The Attorney-in-Fact

The Attorney-in-Fact

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<sup>25</sup> The law in application should be identified according of the respective country

<sup>26</sup> The competent should be identified according of the respective country

## Specific Conditions

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<b>Identification data of the End Customer</b>	Name:
	Representative:
	NIF
	Domicile:
	Telephone:
	Email:
<b>Credit bank account</b>	
<b>Settlement method and periodicity</b>	Transfer/Monthly
<b>Contract Duration</b>	End of the year
<b>Territorial scope of the services provided by the End Customer</b>	National
<b>Channel number</b> <i>(to be filled in by the Provider)</i>	

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#### BungEES project partners

