

# Himolla - Molly

## Multilingual AI Phone Assistant

*VAPI Squad · German · English · French · 3CX SIP Integration*

|                        |   |
|------------------------|---|
| <b>Client</b>          | Himolla Polstermöbel GmbH               |
| <b>Agent Name</b>      | Molly                                   |
| <b>Languages</b>       | German · English · French               |
| <b>Platform</b>        | VAPI (Squad Architecture)               |
| <b>Telephony</b>       | 3CX via SIP Trunk                       |
| <b>Agent Count</b>     | 4 (1 Initial + 3 Language Agents)       |
| <b>Operating Hours</b> | Mon-Fri 08:00-17:00 (Bavarian timezone) |

## Project Overview

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Himolla Polstermöbel is one of the largest upholstered furniture manufacturers in Europe, headquartered in Taufkirchen, Bavaria. The company serves specialist furniture retailers across Germany, Austria, France, and the United Kingdom and receives inbound phone calls in multiple languages - from retailers asking product and order questions, to end customers seeking service technician contacts, to callers enquiring about the himolla Outlet opening hours. The objective of this project was to automate the entire inbound call handling process with a professional, multilingual AI voice assistant that routes every call to the correct destination without human intervention at the front desk.

## Problem Statement

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Himolla's reception function handled a wide variety of call types across three languages, creating several challenges:

- Calls arrived in German, English, and French with no automated language routing - every call required a bilingual human operator to identify the caller's language before handling.
- Ten distinct routing categories (retailers, service technicians, outlet, emergencies, showroom, complaints, departments, sales, unclear) each required different handling logic, making consistent routing difficult for human agents.
- Outside office hours (evenings, weekends, Bavarian public holidays), callers still needed access to outlet hours, service technician contact details, and emergency escalation - but no automated system existed to serve them.
- The service technician lookup required a database query by postal code across two knowledge bases (Germany and Austria), which was slow and error-prone when done manually.
- No recording notice was being delivered consistently to callers at the start of each call, creating compliance risk.

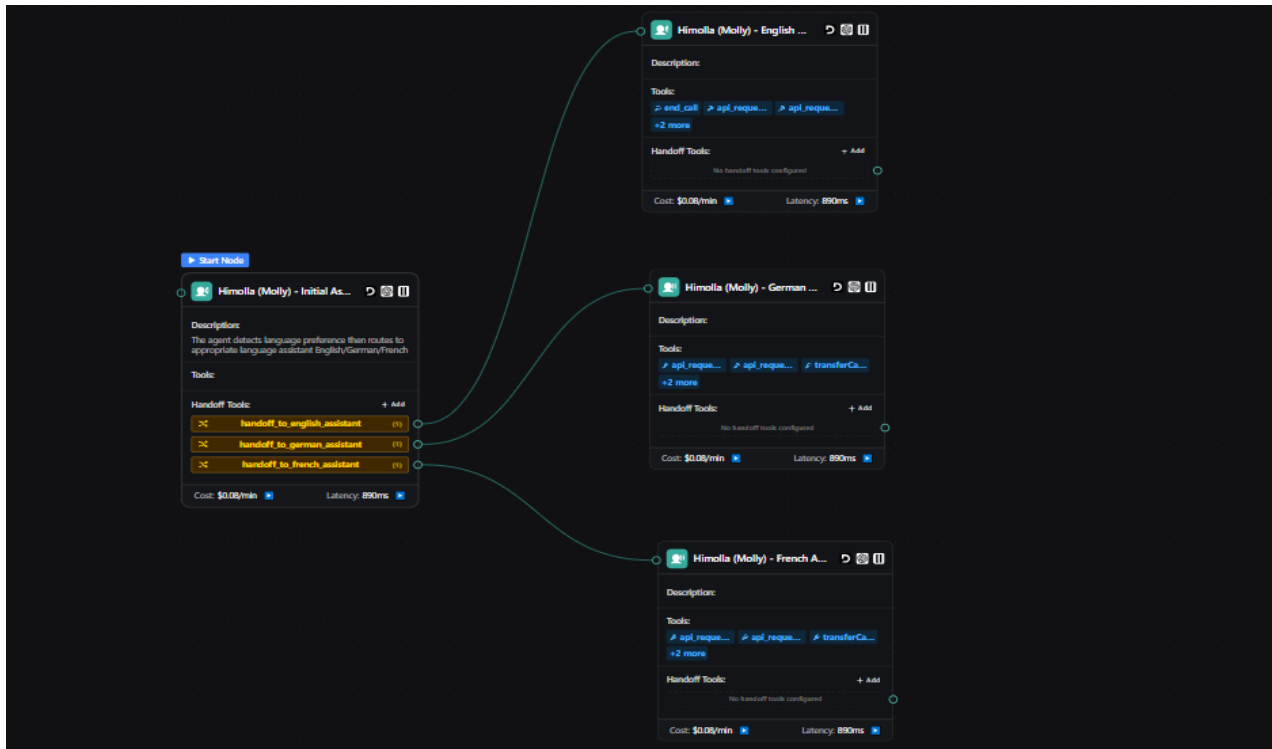
## Solution

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We built Molly - a multilingual AI phone assistant deployed on VAPI - to handle 100% of inbound calls for himolla. Molly uses a Squad architecture: an initial language-detection agent greets the caller and hands off to one of three dedicated language agents (German, English, French), each running the identical routing logic in its respective language. All call transfers are executed via SIP trunk through the company's 3CX phone system.

### VAPI Squad Architecture

The system is structured as a four-agent squad in VAPI. An Initial Agent analyzes the caller's phone number country code to determine which language to greet in, then hands off to the appropriate downstream agent after the caller confirms their language preference.



VAPI Squad - Initial language detection agent hands off to one of three downstream Molly agents (DE / EN / FR)

## Initial Agent - Language Detection

The Initial Agent's sole responsibility is to determine the caller's language and hand off. It analyzes the incoming phone number country code and greets accordingly:

| Country Code                 | Greeting Language          | Handoff Tool                 |
|------------------------------|----------------------------|------------------------------|
| +49 (Germany), +43 (Austria) | German greeting            | handoff_to_german_assistant  |
| +33 (France)                 | French greeting            | handoff_to_french_assistant  |
| +44 (UK) or other            | English greeting (default) | handoff_to_english_assistant |

## The Downstream Agent - Molly

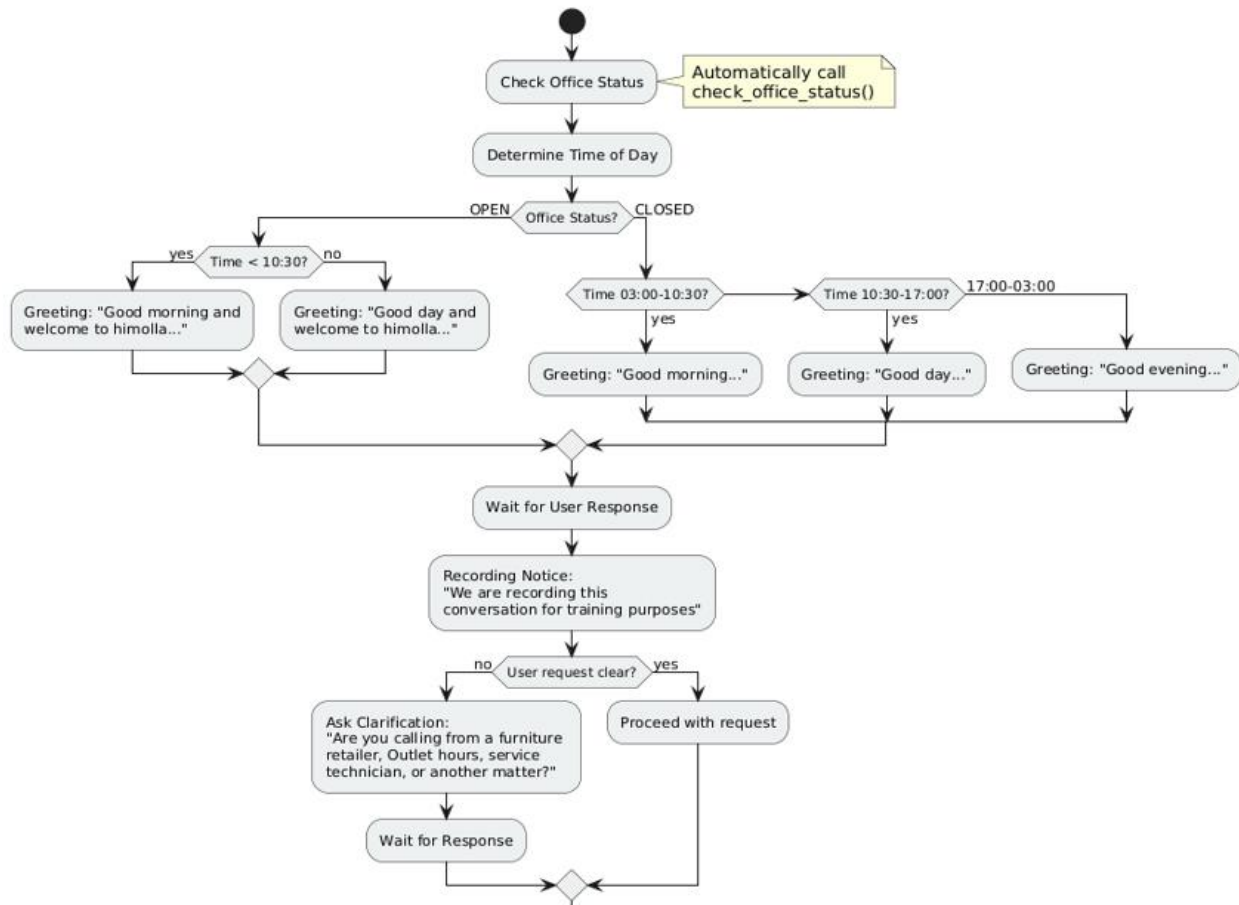
Each of the three downstream agents runs an identical routing system prompt - one in German, one in English, one in French. Molly handles 10 distinct routing categories through a structured decision tree. Every call begins with a one-time recording notice, a time-appropriate greeting, and an optional clarification question if the caller's intent is ambiguous.

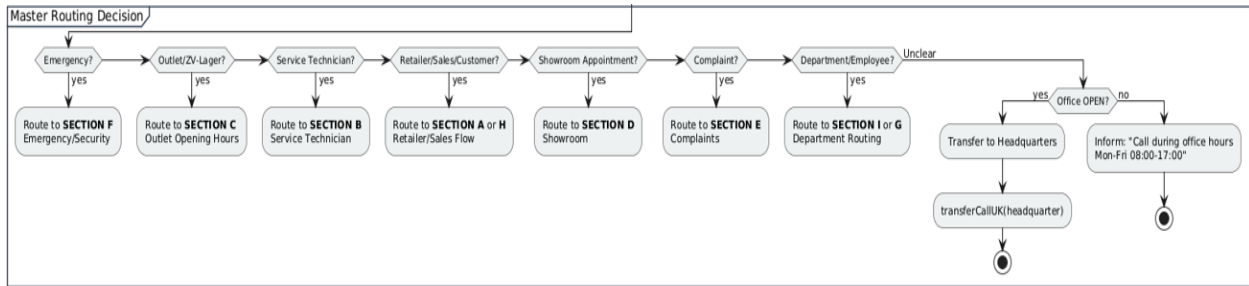
Molly's call routing covers the following ten sections:

| Section | Trigger   | Action  |
|---------|---|---|
| A       | Retailer call (product questions or complaints) | Transfer to Sales (language-specific) or Customer Service |

| Section | Trigger   | Action  |
|---------|---|---|
| B       | Service technician request                        | Warranty notice → ZIP code lookup → SMS with technician info  |
| C       | Outlet / ZV-Lager opening hours                   | Dynamic status response + optional transfer if outlet is open |
| D       | Showroom appointment request                      | Transfer to Headquarters (office hours only)                  |
| E       | Complaint (staff or retailer)                     | Refer to retailer or transfer to Headquarters                 |
| F       | Emergency / Security (24/7)                       | Confirm himolla vehicle/location involved → Emergency line    |
| G       | Specific employee request                         | Transfer to Headquarters (office hours only)                  |
| H       | Sales detail flow (dealer vs. end customer)       | Branch on caller type and purchase history → Sales or CS      |
| I       | Department routing (IT / HR / Purchasing / Prime) | Direct transfer to relevant department                        |
| J       | Unclear or repetitive exchanges                   | Transfer to Headquarters frontdesk for human handling         |

**Molly - himolla Phone Assistant Call Flow**

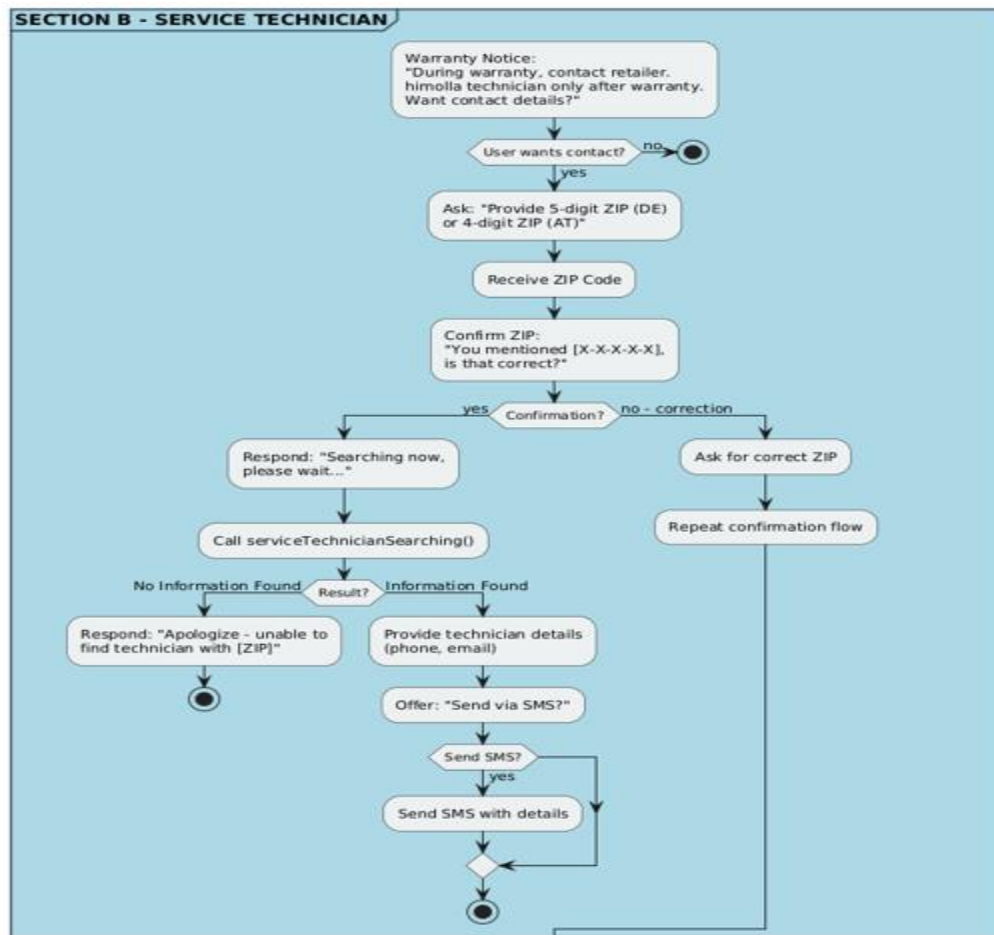




## Service Technician Lookup

Section B includes a dedicated sub-flow for connecting end customers with a local service technician after the warranty period has expired. Molly cannot handle in-warranty cases - those are always directed to the retailer.

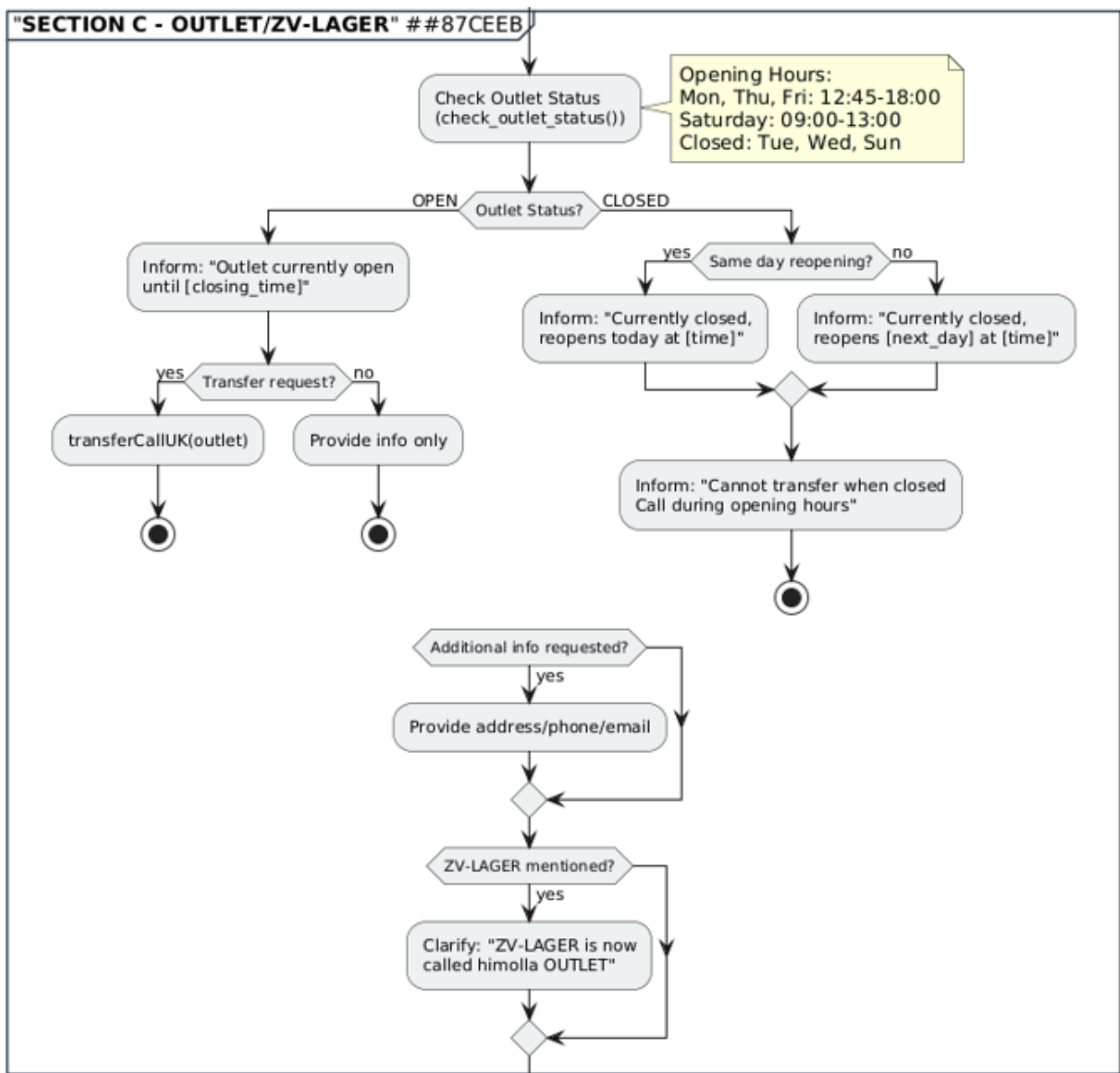
- Molly informs the caller that warranty and guarantee cases must be handled via their retailer first.
- If the caller confirms they are outside the warranty period, Molly asks for their postal code.
- The postal code is repeated digit-by-digit for confirmation before the lookup proceeds.
- Molly searches the correct knowledge base (Kundendienst\_DE or Kundendienst\_AT).
- The technician's name, phone number, and email address are read out very slowly and clearly. The contact details are also sent via SMS if the caller is on a mobile number.



## Outlet / ZV-Lager Handling

The Outlet section has a critical hard rule: the himolla OUTLET (formerly called ZV-Lager) and the main office are entirely separate entities. If a caller asks about ZV-Lager, Molly clarifies that this is now the himolla OUTLET. Outlet status is checked dynamically via the `check_outlet_status` function and the response adapts accordingly:

- If the Outlet is currently open: Molly states the closing time and can transfer the call directly to the Outlet line.
- If the Outlet is closed before opening: Molly states today's opening time.
- If the Outlet is closed for the day or it is a closed day (Tue/Wed/Sun): Molly states the next opening day and time.



## Office Hours & Holiday Awareness

Molly's behaviour changes entirely based on office status. The `check_office_status` function is called automatically at the start of every call. During office hours (Monday-Friday, 08:00-17:00), Molly can transfer to any department. Outside office hours, transfers to specialist departments are blocked and Molly can only:

- Transfer to the Outlet if it is currently open.
- Provide service technician contact information.
- Handle emergency escalation (available 24/7).
- Provide general information about products, the company, and the outlet.

The holiday calendar covers all Bavarian public holidays from 2026 through 2028 and is embedded directly in Molly's knowledge base, ensuring that calls on Bavarian holidays are treated as outside office hours regardless of the day of the week.

## Key Design Decisions

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### Squad Architecture for Language Separation

Rather than building a single multilingual agent, the system uses a VAPI Squad of four agents. The Initial Agent handles only one concern - language detection - and immediately hands off. Each downstream agent then runs the full routing logic natively in its own language. This separation keeps each agent's system prompt clean, avoids language-switching errors mid-call, and makes maintenance simple: changes to the routing logic are made in one base prompt and propagated to all three language versions.

### Phone Number as Language Signal

Language detection is based on the incoming phone number's country code, not on voice recognition. This is a deliberate design choice: detecting language from speech in the first few words is unreliable. Using the country code provides an instant, deterministic language assignment that is correct the overwhelming majority of the time. If the caller's language does not match (e.g. a French speaker calling from a German number), they can simply state their preference and the agent adapts.

### Hard Rule: Outlet ≠ Office

A critical rule is embedded as a hard constraint in Molly's prompt: the `himolla OUTLET` and the `himolla main office` are completely unrelated entities. `check_outlet_status` is always called for outlet queries, and `check_office_status` is always called for office queries - never interchanged. This prevents a caller asking about outlet hours from being told "the office is closed" when the outlet is actually open, and vice versa.

### One-Time Start Flow Enforcement

The recording notice, greeting, and time check are locked to the very beginning of each call and can never be repeated. This is enforced by a global continuity rule in the system prompt. After the initial greeting, all responses refer only to the caller's most recent statement. This prevents the jarring experience of hearing the welcome script repeated mid-conversation.

## Silent Transfer Rule

When transferring a call, Molly executes the transferCall function without any preceding announcement. There is no "Please hold while I transfer you" - the transfer happens immediately. This reduces perceived latency and matches how a professional receptionist handles routing.

## Tech Stack

| Component                 | Tool / Platform  |
|---------------------------|--|
| Voice AI Platform         | VAPI (Squad Mode)                                      |
| Agent Architecture        | 1 Initial Agent + 3 Language Agents (DE/EN/FR)         |
| Telephony / Call Transfer | 3CX PBX via SIP Trunk                                  |
| Voice Model               | HOPE - Natural Conversations                           |
| Primary Language          | German (Europe/Berlin timezone)                        |
| Knowledge Base            | Kundendienst_DE, Kundendienst_AT (service tech lookup) |
| Holiday Calendar          | Bavarian public holidays 2026–2028 embedded in prompt  |
| Dynamic Status Checks     | check_office_status · check_outlet_status functions    |

## Results

- 100% of inbound calls handled automatically in the caller's language - no human operator needed at the front desk for initial routing.
- Ten distinct routing categories covered with deterministic logic, ensuring every call type reaches the correct destination.
- Calls served 24/7: emergency, outlet hours, and service technician lookup are always available regardless of office status.
- Recording notice delivered consistently on every call, eliminating the compliance gap.
- Service technician contact details provided via spoken readout and SMS within the call - no callback required.
- Outlet status communicated dynamically: callers always know whether the outlet is currently open, and are transferred directly when it is.
- Bavarian holiday awareness built in through 2028 - office closed responses are automatic on public holidays.

*Molly handles the full reception function for himolla - from language identification and call routing to information delivery and department transfer - as a single seamless automated system operating across three languages.*