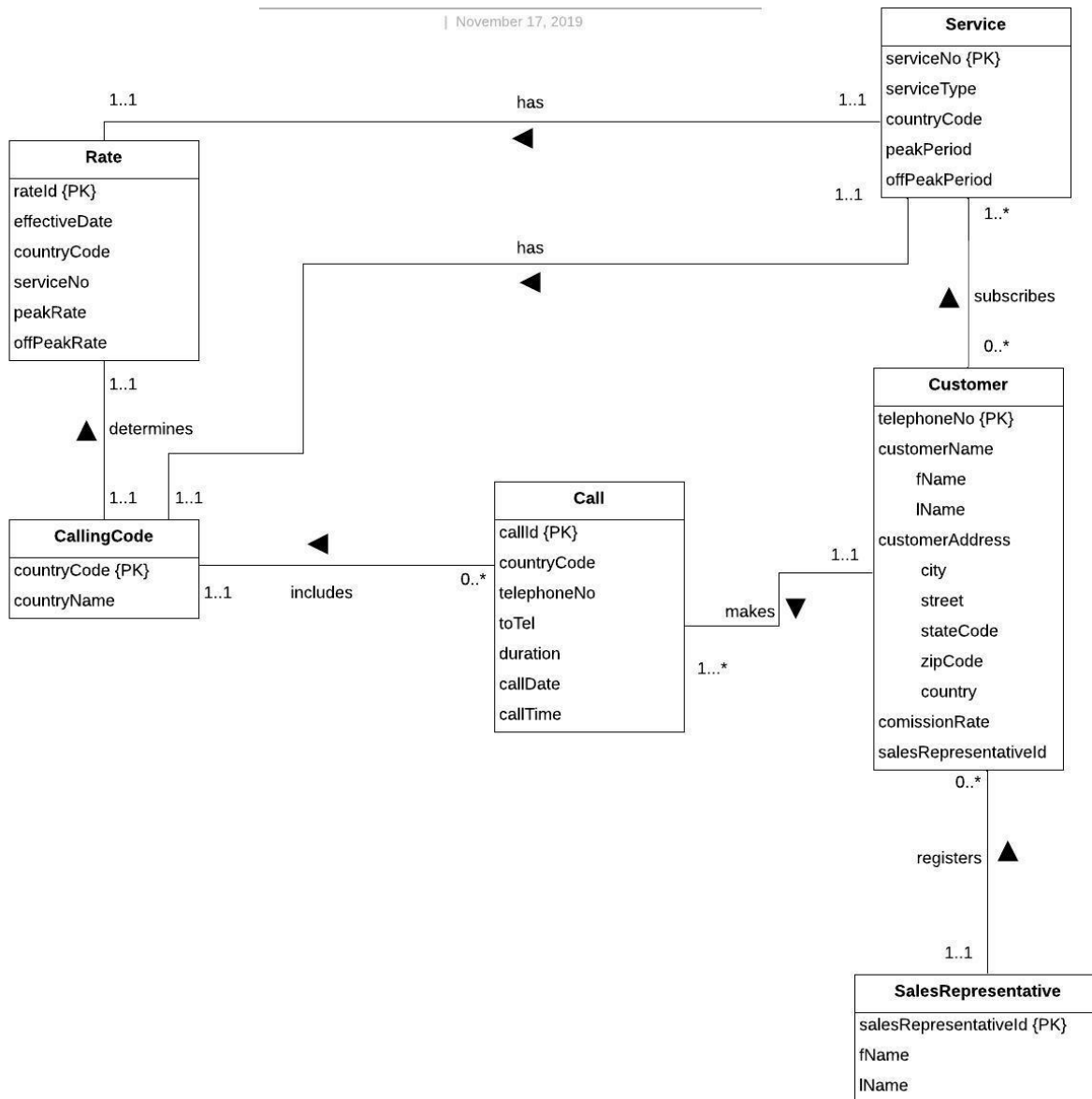


TELEPHONE COMPANY ERD

| November 17, 2019



Customer

- Many : Many participations with service
- 1: Many with call
- Mandatory with salesRepresentative

Service

- Mandatory participation with Rate
- Many : Many participations with Customer

Rate

- **1:1 Mandatory with service**
- **1:1 Mandatory with CallingCode**

Call

- **Mandatory participation with CallingCode**
- **Mandatory participation with Customer**

CallingCode

- **Mandatory with Rate**
- **1:Many with Call**

SalesRepresentative

- **1: Many with Customer**

Customer (telephoneNo, fName, lName, zipCode, city, street, stateCode, country, comissionRate, salesRepresentativeId, serviceNo)

PK: telephoneNo

FK: salesRepresentativeId References SalesRepresentative(salesRepresentative)

Service (serviceNo, serviceType, countryCode, peakPeriod, offPeakPeriod)

PK: serviceNo

FK: countryCode References CallingCode(countryCode)

Rate (rateId, effectiveDate, countryCode, serviceNo, peakRate, offPeakRate)

PK: rateId

FK: countryCode References CallingCode(countryCode)

FK: serviceNo References Service(serviceNo)

AK: effectiveDate, toCode, serviceNo

CallingCode (countryCode, countryName)

PK: countryCode

AK: countryName

Call (callId, countryCode, telephoneNo, toTel, duration, callDate, callTime)

PK: callId

FK: countryCode References CallingCode (countryCode)

FK: telephoneNo References Customer(telephoneNo)

SalesRepresentative (salesReperesentativeId, fName, lName)

PK: salesReperesentativeId

***: * relationship**

customerServices (custServiceId, customerName, serviceNo, telephoneNo)

PK : serviceId

FK: serviceNo References Service(serviceNo)

FK: telephoneNo References Customer(telephoneNo)

AK: telephoneNo, serviceNo