**Prüfungen / Metrik**

1. Summe aller Line-Items sollte die Summe dem "payable\_amount" – "rounding\_difference" entsprechen
2. Menge Energie = Menge Netznutzung (nur kWh), ohne KEV, SDL, etc. Dies gilt nur, wenn sowohl Netznutzung als auch Energie in derselben Rechnung vorhanden sind. Dies kann aber auch in der DB geprüft werden … und geht dort vermutlich einfacher.

Mussfelder (sehr hoch gewichten), sind fast unerlässlich, um die Rechnung verarbeiten zu können. Wenn einzelne fehlen, können wir diese allenfalls aus unserem Datenstamm plausibilisieren.

Sollfelder (hoch gewichten), sind wichtig in der Zuordnung oder der Datenweiterleitung/Kommunikation

Sollte wir haben Felder (dies im Moment noch nicht gewichten, weil ecp diese Daten noch nicht liefert)

Textauslesung (ähnlichkeit mit geringem Gewicht berücksichtigen), dies sind v.a. die Bezeichnungen Zeilen auf der Rechnung. Diese werden heute aus «Vorlagen» der einzelnen BZArten gezogen und selten korrigiert, weil sie nicht abrechnungsrelevant sind. Aber es wäre schön, man hätte die korrekten Text, dann könnte man besser daraus lernen.

Informative Felder (nicht gewichten), diese Felder werden heute noch kaum erfasst oder sind selten in den Stammdaten abgelegt, aber sie wären spannend, wenn man sie automatisch auslesen kann.

Felder ohne Farbe (im ersten Schritt der Gewichtung ignorieren)

Im Header sind die folgenden Felder wichtig:

{

"header": {

"filename": "10300359.pdf",

"invoice\_number": "751204415439",

"invoice\_date": "16.04.2024",

"due\_date": "16.05.2024",

"customer\_number": "",

"contract\_number": "",

"vat\_number": "CHE-103.258.498",

"billing\_period": "01.03.2024-31.03.2024",

"total\_amount\_excl\_vat": "1798.50",

"total\_amount\_excl\_vat\_unit": "CHF",

"vat\_amount": "145.68",

"vat\_amount\_unit": "CHF",

"total\_amount\_incl\_vat": "1944.18",

"total\_amount\_incl\_vat\_unit": "CHF",

"-0.03",

"rounding\_difference\_unit": "CHF",

"payable\_amount": "1944.15",

"payable\_amount\_unit": "CHF",

"delivery\_address": {

"description": "",

"type\_of\_delivery\_location": "",

"id\_of\_delivery\_location": "",

"address\_line1": "",

"city\_zip": ""

},

"address": {

"recipient": "",

"address\_line1": "",

"reference": "",

"city\_zip": ""

},

"provider": {

"name": "BKW Energie AG",

"address\_line1": "Viktoriaplatz 2",

"city\_zip": "3013 Bern"

},

"contact": {

"email": "",

"phone": "",

"website": ""

}

},

"line\_items": [

Line-Items, welche eine physikalische Einheit (kWh, kW, kVarh, Liter, L, m3, … ) haben, sollte wiefolgt gewichet werden.

"total\_price" sollte "total\_amount" heissen … , analog "total\_price\_unit", "total\_price\_incl\_vat", "total\_price\_incl\_vat\_unit"

{

"line\_items\_description": "Arbeit Hochtarif",

"line\_items\_description\_in\_original\_language": "Arbeit Hochtarif",

"delivery\_period": "01.03.2024-31.03.2024",

"quantity": "9726",

"quantity\_unit": "", (@Recep: Das sollten wir eigentlich auch als Output geben können)

"unit\_price": "0.0171",

"unit\_price\_unit": "",

"total\_price": "166.31",

"total\_price\_unit": "CHF",

"vat\_amount": "13.4711",

"vat\_amount\_unit": "CHF",

"total\_price\_incl\_vat": "179.781",

"total\_price\_incl\_vat\_unit": "CHF",

"meter\_point": "CH1022201234500000000000000458561",

"meter\_number": "",

"utility": "E",

"category": "Netznutzung",

"tarif\_product": "",

"tax\_category": "V81",

"tax\_rate": "0.081",

"BZArt": "DL\_HT",

"VS\_ID": "122431",

"VS\_Search": "",

"VS\_Adr": "Wehrstrasse 47",

**"V**S\_Ort": "3203 Mühleberg"

},

Line-Items, welche eine zeitliche Einheiten haben (Tag, Monat, Quartal, Jahr, … ) haben, sollte wiefolgt gewichet werden.

{

"line\_items\_description": "Grundtarif",

"line\_items\_description\_in\_original\_language": "Grundtarif",

"delivery\_period": "01.03.2024-31.03.2024",

"quantity": "1",

"quantity\_unit": "",

"unit\_price": "0",

"unit\_price\_unit": "",

"total\_price": "77.46",

"total\_price\_unit": "CHF",

"vat\_amount": "6.27426",

"vat\_amount\_unit": "CHF",

"total\_price\_incl\_vat": "83.7343",

"total\_price\_incl\_vat\_unit": "CHF",

"meter\_point": "CH1022201234500000000000000458561",

"meter\_number": "",

"utility": "E",

"category": "Netznutzung",

"tarif\_product": "",

"tax\_category": "V81",

"tax\_rate": "0.081",

"BZArt": "DL\_Geb",

"VS\_ID": "122431",

"VS\_Search": "",

"VS\_Adr": "Wehrstrasse 47",

"VS\_Ort": "3203 Mühleberg"

},

{

"line\_items\_description": "Arbeit Niedertarif",

"line\_items\_description\_in\_original\_language": "Arbeit Niedertarif",

"delivery\_period": "01.03.2024-31.03.2024",

"quantity": "6392",

"quantity\_unit": "",

"unit\_price": "0.0087",

"unit\_price\_unit": "",

"total\_price": "55.61",

"total\_price\_unit": "CHF",

"vat\_amount": "4.50441",

"vat\_amount\_unit": "CHF",

"total\_price\_incl\_vat": "60.1144",

"total\_price\_incl\_vat\_unit": "CHF",

"meter\_point": "CH1022201234500000000000000458561",

"meter\_number": "",

"utility": "E",

"category": "Netznutzung",

"tarif\_product": "",

"tax\_category": "V81",

"tax\_rate": "0.081",

"BZArt": "DL\_NT",

"VS\_ID": "122431",

"VS\_Search": "",

"VS\_Adr": "Wehrstrasse 47",

"VS\_Ort": "3203 Mühleberg"

},

{

"line\_items\_description": "Leistungstarif",

"line\_items\_description\_in\_original\_language": "Leistungstarif",

"delivery\_period": "01.03.2024-31.03.2024",

"quantity": "53.9",

"quantity\_unit": "",

"unit\_price": "14.64",

"unit\_price\_unit": "",

"total\_price": "789.1",

"total\_price\_unit": "CHF",

"vat\_amount": "63.9171",

"vat\_amount\_unit": "CHF",

"total\_price\_incl\_vat": "853.017",

"total\_price\_incl\_vat\_unit": "CHF",

"meter\_point": "CH1022201234500000000000000458561",

"meter\_number": "",

"utility": "E",

"category": "Netznutzung",

"tarif\_product": "",

"tax\_category": "V81",

"tax\_rate": "0.081",

"BZArt": "DL\_Leistung",

"VS\_ID": "122431",

"VS\_Search": "",

"VS\_Adr": "Wehrstrasse 47",

"VS\_Ort": "3203 Mühleberg"

},

{

"line\_items\_description": "Systemdienstleistungen Swissgrid",

"line\_items\_description\_in\_original\_language": "Systemdienstleistungen Swissgrid",

"delivery\_period": "01.03.2024-31.03.2024",

"quantity": "16118",

"quantity\_unit": "",

"unit\_price": "0.0075",

"unit\_price\_unit": "",

"total\_price": "120.89",

"total\_price\_unit": "CHF",

"vat\_amount": "9.79209",

"vat\_amount\_unit": "CHF",

"total\_price\_incl\_vat": "130.682",

"total\_price\_incl\_vat\_unit": "CHF",

"meter\_point": "CH1022201234500000000000000458561",

"meter\_number": "",

"utility": "E",

"category": "Netznutzung",

"tarif\_product": "",

"tax\_category": "V81",

"tax\_rate": "0.081",

"BZArt": "NDL\_System",

"VS\_ID": "122431",

"VS\_Search": "",

"VS\_Adr": "Wehrstrasse 47",

"VS\_Ort": "3203 Mühleberg"

},

{

"line\_items\_description": "Blindenergie Hochtarif gemessen",

"line\_items\_description\_in\_original\_language": "Blindenergie Hochtarif gemessen",

"delivery\_period": "01.03.2024-31.03.2024",

"quantity": "0",

"quantity\_unit": "",

"unit\_price": "0",

"unit\_price\_unit": "",

"total\_price": "0",

"total\_price\_unit": "CHF",

"vat\_amount": "0",

"vat\_amount\_unit": "CHF",

"total\_price\_incl\_vat": "0",

"total\_price\_incl\_vat\_unit": "CHF",

"meter\_point": "CH1022201234500000000000000458561",

"meter\_number": "",

"utility": "E",

"category": "Netznutzung",

"tarif\_product": "",

"tax\_category": "V81",

"tax\_rate": "0.081",

"BZArt": "DL\_BHT",

"VS\_ID": "122431",

"VS\_Search": "",

"VS\_Adr": "Wehrstrasse 47",

"VS\_Ort": "3203 Mühleberg"

},

{

"line\_items\_description": "Blindenergie Niedertarif gemessen",

"line\_items\_description\_in\_original\_language": "Blindenergie Niedertarif gemessen",

"delivery\_period": "01.03.2024-31.03.2024",

"quantity": "0",

"quantity\_unit": "",

"unit\_price": "0",

"unit\_price\_unit": "",

"total\_price": "0",

"total\_price\_unit": "CHF",

"vat\_amount": "0",

"vat\_amount\_unit": "CHF",

"total\_price\_incl\_vat": "0",

"total\_price\_incl\_vat\_unit": "CHF",

"meter\_point": "CH1022201234500000000000000458561",

"meter\_number": "",

"utility": "E",

"category": "Netznutzung",

"tarif\_product": "",

"tax\_category": "V81",

"tax\_rate": "0.081",

"BZArt": "DL\_BNT",

"VS\_ID": "122431",

"VS\_Search": "",

"VS\_Adr": "Wehrstrasse 47",

"VS\_Ort": "3203 Mühleberg"

},

{

"line\_items\_description": "Stromreserve",

"line\_items\_description\_in\_original\_language": "Stromreserve",

"delivery\_period": "01.03.2024-31.03.2024",

"quantity": "16118",

"quantity\_unit": "kWh",

"unit\_price": "0.012",

"unit\_price\_unit": "",

"total\_price": "193.42",

"total\_price\_unit": "CHF",

"vat\_amount": "15.667",

"vat\_amount\_unit": "CHF",

"total\_price\_incl\_vat": "209.087",

"total\_price\_incl\_vat\_unit": "CHF",

"meter\_point": "CH1022201234500000000000000458561",

"meter\_number": "",

"utility": "E",

"category": "Netznutzung",

"tarif\_product": "",

"tax\_category": "V81",

"tax\_rate": "0.081",

"BZArt": "ERA\_M",

"VS\_ID": "122431",

"VS\_Search": "",

"VS\_Adr": "Wehrstrasse 47",

"VS\_Ort": "3203 Mühleberg"

},

{

"line\_items\_description": "Gesetzliche Förderabgabe\*",

"line\_items\_description\_in\_original\_language": "Gesetzliche Förderabgabe\*",

"delivery\_period": "01.03.2024-31.03.2024",

"quantity": "16118",

"quantity\_unit": "kWh",

"unit\_price": "0.023",

"unit\_price\_unit": "",

"total\_price": "370.71",

"total\_price\_unit": "CHF",

"vat\_amount": "30.0275",

"vat\_amount\_unit": "CHF",

"total\_price\_incl\_vat": "400.738",

"total\_price\_incl\_vat\_unit": "CHF",

"meter\_point": "CH1022201234500000000000000458561",

"meter\_number": "",

"utility": "E",

"category": "Netznutzung",

"tarif\_product": "",

"tax\_category": "V81",

"tax\_rate": "0.081",

"BZArt": "KEV",

"VS\_ID": "122431",

"VS\_Search": "",

"VS\_Adr": "Wehrstrasse 47",

"VS\_Ort": "3203 Mühleberg"

},

{

"line\_items\_description": "Abgaben und Leistungen an die Gemeinde",

"line\_items\_description\_in\_original\_language": "Abgaben und Leistungen an die Gemeinde",

"delivery\_period": "01.03.2024-31.03.2024",

"quantity": "1",

"quantity\_unit": "",

"unit\_price": "25",

"unit\_price\_unit": "",

"total\_price": "25",

"total\_price\_unit": "CHF",

"vat\_amount": "2.025",

"vat\_amount\_unit": "CHF",

"total\_price\_incl\_vat": "27.025",

"total\_price\_incl\_vat\_unit": "CHF",

"meter\_point": "CH1022201234500000000000000458561",

"meter\_number": "",

"utility": "E",

"category": "Netznutzung",

"tarif\_product": "",

"tax\_category": "V81",

"tax\_rate": "0.081",

"BZArt": "SA\_Z",

"VS\_ID": "122431",

"VS\_Search": "",

"VS\_Adr": "Wehrstrasse 47",

"VS\_Ort": "3203 Mühleberg"

}

]

}