Telephony Regular Expressions

| Character | Matches |
| :--- | :--- |
| \d | Any digit |
| \D | Any non-digit character |
| . | Any character |
| $[\mathrm{abc}]$ | Only a, b, or c |
| $[0-9]$ | Numbers 0 to 9 |
| $\{\mathrm{~m}\}$ | m Repetitions |
| $\{\mathrm{m}, \mathrm{n}\}$ | m to n Repetitions |
| $*$ | Zero or more repetitions |
| + | One or more repetitions |
| $?$ | Optional character |
| $\wedge . . . \$$ | Starts and ends |
| (abc $\mid$ def $)$ | Matches abc or def |

$\wedge(\backslash+?[0 \mid 1]) ?([2-9][0-9]\{2\})([2-9][0-9]\{2\})([0-9]\{4\}) \$$
$+1 .$.
+0...
$1 .$.
0...

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Regular expressions can be verified at: https://regex101.com/
Below is the explanation of the dial string:
$\wedge$ asserts position at start of a line
1st Capturing Group
( $\backslash+$ ? $[0 \mid 1]$ )?
? matches the previous token between zero and one times, as many times as possible, giving back as needed (greedy)
।+
matches the character + with index $43_{10}\left(2 \mathrm{~B}_{16}\right.$ or $53_{8}$ ) literally (case sensitive)
? matches the previous token between zero and one times, as many times as possible, giving back as
needed (greedy)
Match a single character present in the list below
[0|1]
$0 \mid 1$
matches a single character in the list $0 \mid 1$ (case sensitive)
2nd Capturing Group
([2-9][0-9]\{2\})
Match a single character present in the list below
[2-9]
2-9 matches a single character in the range between 2 (index 50) and 9 (index 57) (case sensitive)
Match a single character present in the list below
[0-9]
$\{2\}$ matches the previous token exactly 2 times
0-9 matches a single character in the range between 0 (index 48) and 9 (index 57) (case sensitive)
3rd Capturing Group
([2-9][0-9]\{2\})
Match a single character present in the list below
[2-9]
2-9 matches a single character in the range between 2 (index 50) and 9 (index 57) (case sensitive)
Match a single character present in the list below
[0-9]
$\{2\}$ matches the previous token exactly 2 times
$0-9$ matches a single character in the range between 0 (index 48) and 9 (index 57) (case sensitive)
4th Capturing Group
([0-9]\{4\})
Match a single character present in the list below
[0-9]
$\{4\}$ matches the previous token exactly 4 times
$0-9$ matches a single character in the range between 0 (index 48) and 9 (index 57) (case sensitive) $\$$ asserts position at the end of a line
$\$ 1$ is the expression that sends the numbers of the dial plan that are between the parenthesis.

