SDR (Service Detail Record)

SDR (**Service Detail Record**) represents recorded data for a specific service used by the phone during the month. This name is derived from an earlier term - **CDR** (**Call Detail Record**). But, nowadays in addition to the call service, we also have a bunch of new services: sms service, internet, various social media and application services, international calls and roaming.

SDR types are defined in the **service** db_table.

SDR				SDR		
ICL*	**international calls**	**price**		RMG**	**roaming**	**price**
CZ1	- calls zone1	15 cu/min		CZ1	- calls zone1 outcoming	4 cu/min
CZ2	- calls zone2	20 cu/min		CZ2	- calls zone2 outcoming	8 cu/min
SZ1	- SMS zone1	5 cu/msg		SZ1	- SMS zone1 outcoming	2 cu/msg
SZ2	- SMS zone2	8 cu/msg		SZ2	- SMS zone2 outcoming	4 cu/msg
				INT	- internet 1MB	0.1 cu

service	detail	record	SDR	
			CLS	record for one call
			SMS	record for one sms
			INT	internet consumption
			ASM	social media and app cons.
			ICL	* above
			RMG	**above

SDR service codes

SDR input format has:
- phone number
- service code
- called number ("-" for internet, applications and social media)
- service start time [s]
- service end time [s]
- msg amount ("1" - sms, "0" - other services)
- mb amount [MB] (represents consumption for internet or applications and social media; "0.00" - for calls, sms, international calls and roaming)

an important parameter for calculation, derived from the input time data, is:
duration [min] = end_time - start_time
(for sms service the duration is irrelevant, so we use end_time - start_time =1s).

we can calculate how much of a particular service is left until the end of the month:
left(remaining)_amount = total_input_amount – current_output_amount

for a specific service:
current_output_amount = sum_of_all_amounts, calculated from the SDR data related to this specific service and specific phone, from the beginning of the current month until the current moment).

(total_input_amount depends on package frames and addon frames)