

Experience of Sudan with regard to the utilization of UHF Band

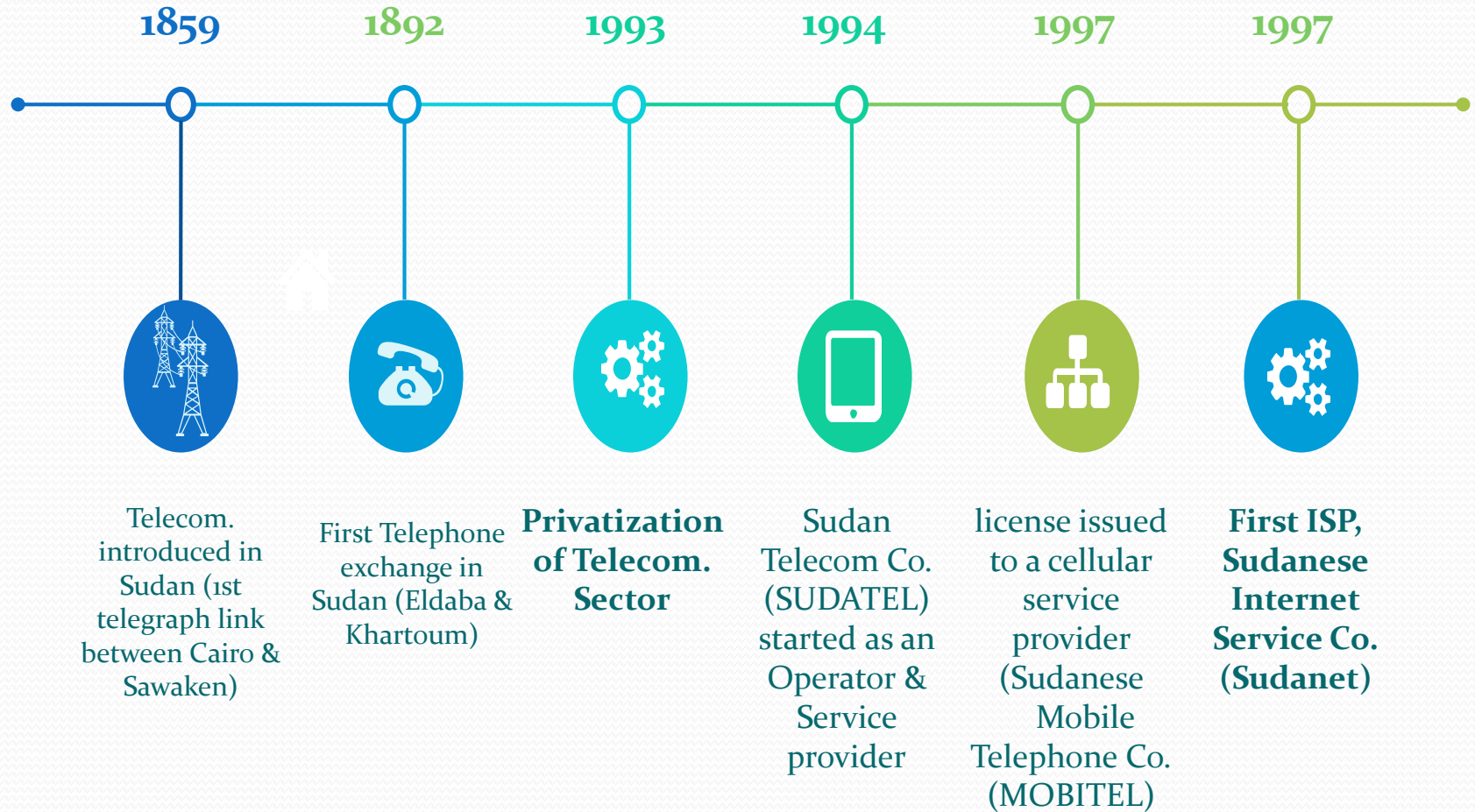
Entsar Mahmoud
Entsar@tpra.gov.sd



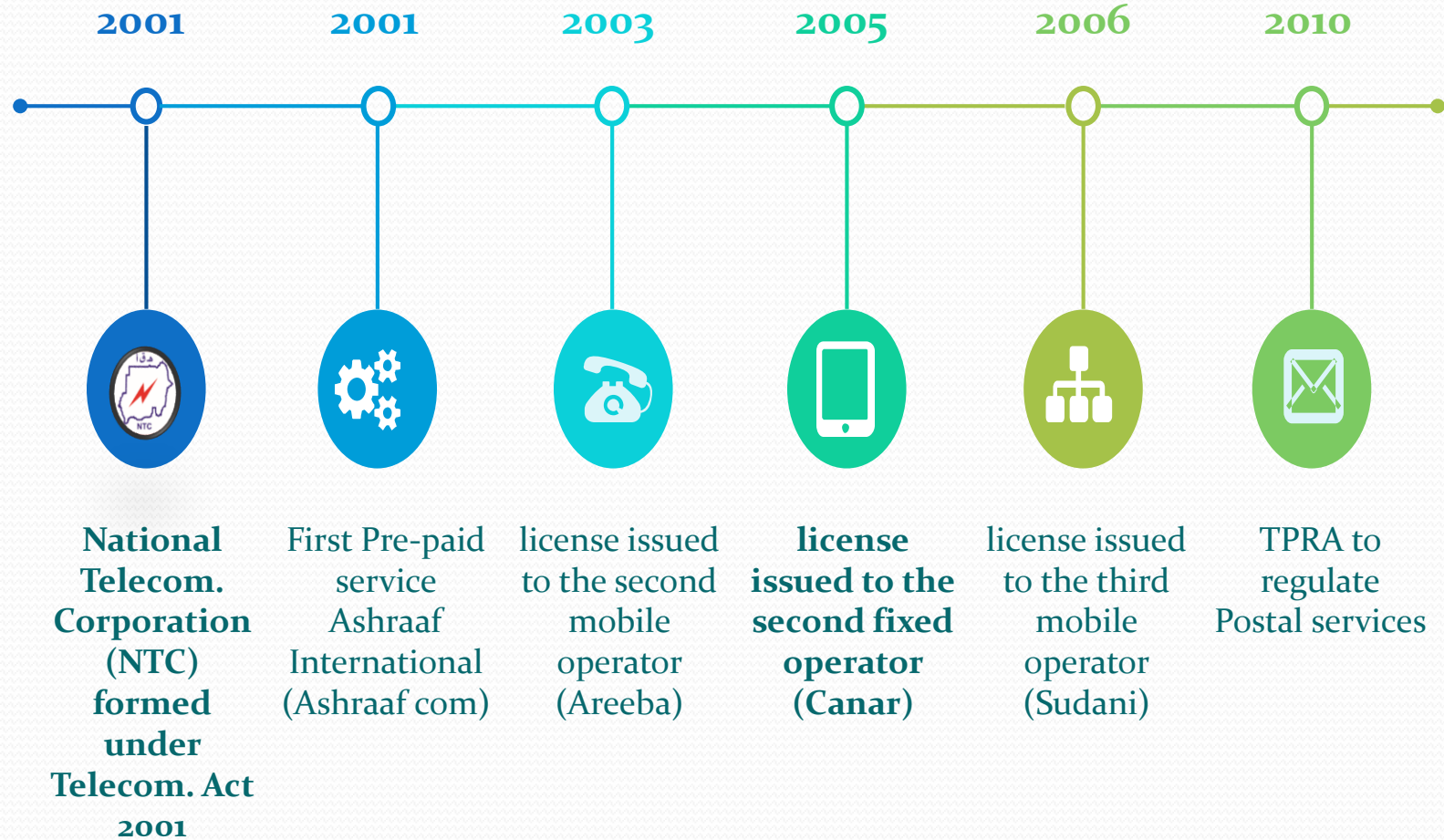
Telecommunication Sector in Sudan



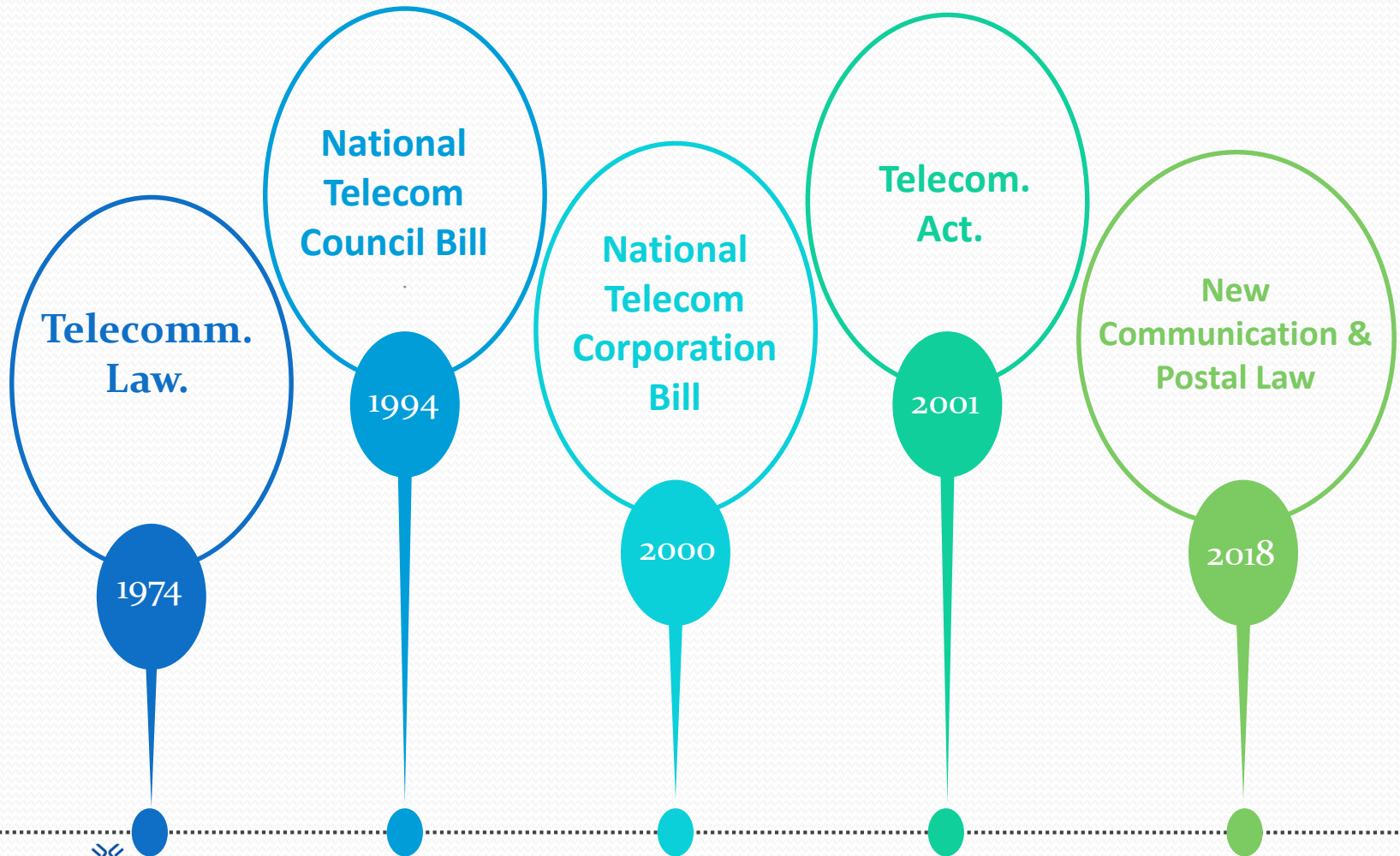
Telecommunication Progress



Telecommunication Progress

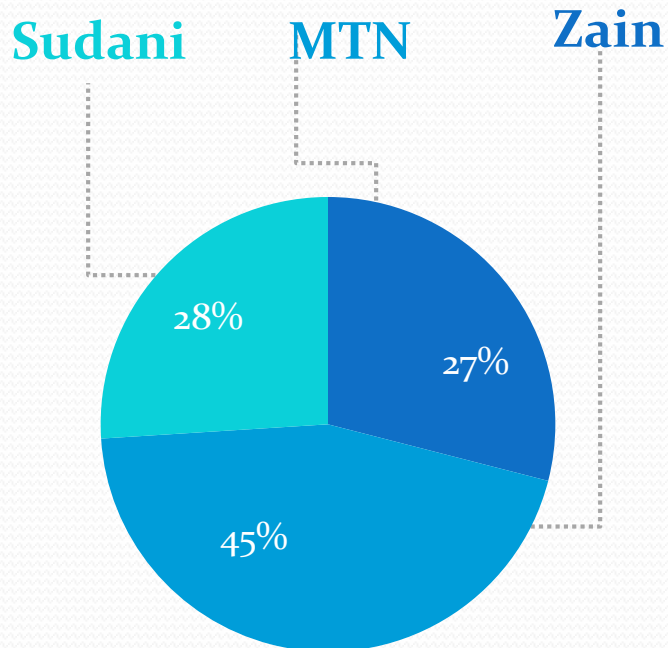


Legislations

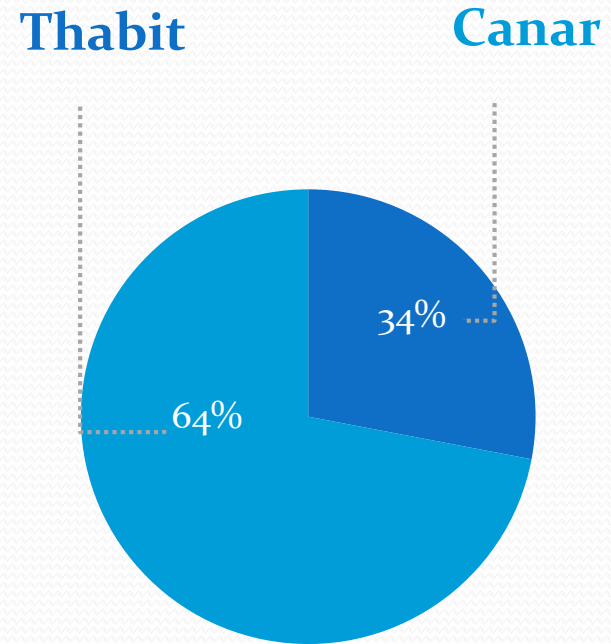


Operators Market Share

Mobile Market Share




Fixed Market Share



Current Status



Fully privatized
Sector with 4
companies
operating: 1 on the
Stock Exchange and
2 Private Companies
owned by
international
entities: Zain, MTN



3 delivering
mobile services
and 2 managing
the main
backbone
network for the
country and
delivering fixed
network services.

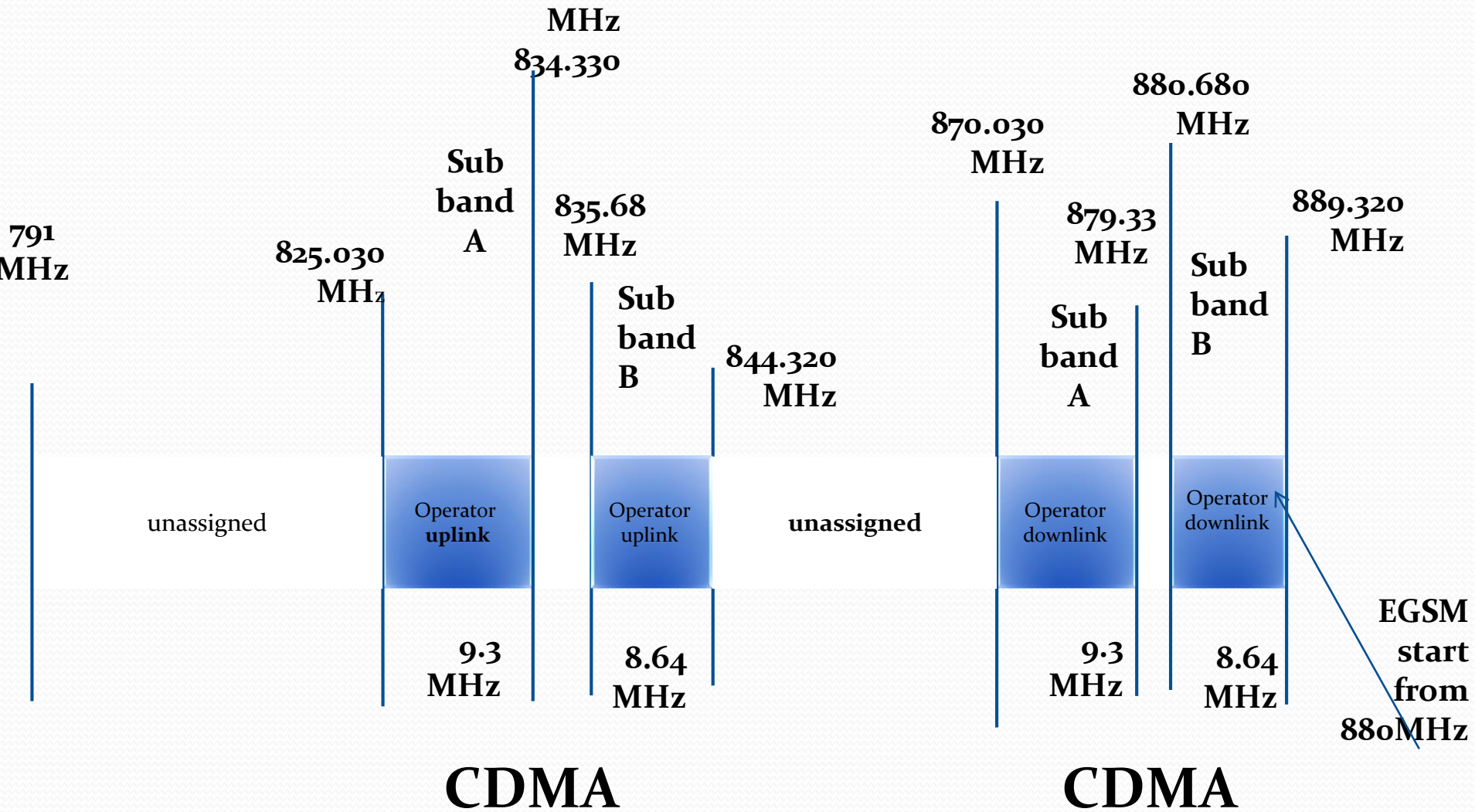


4G In Sudan

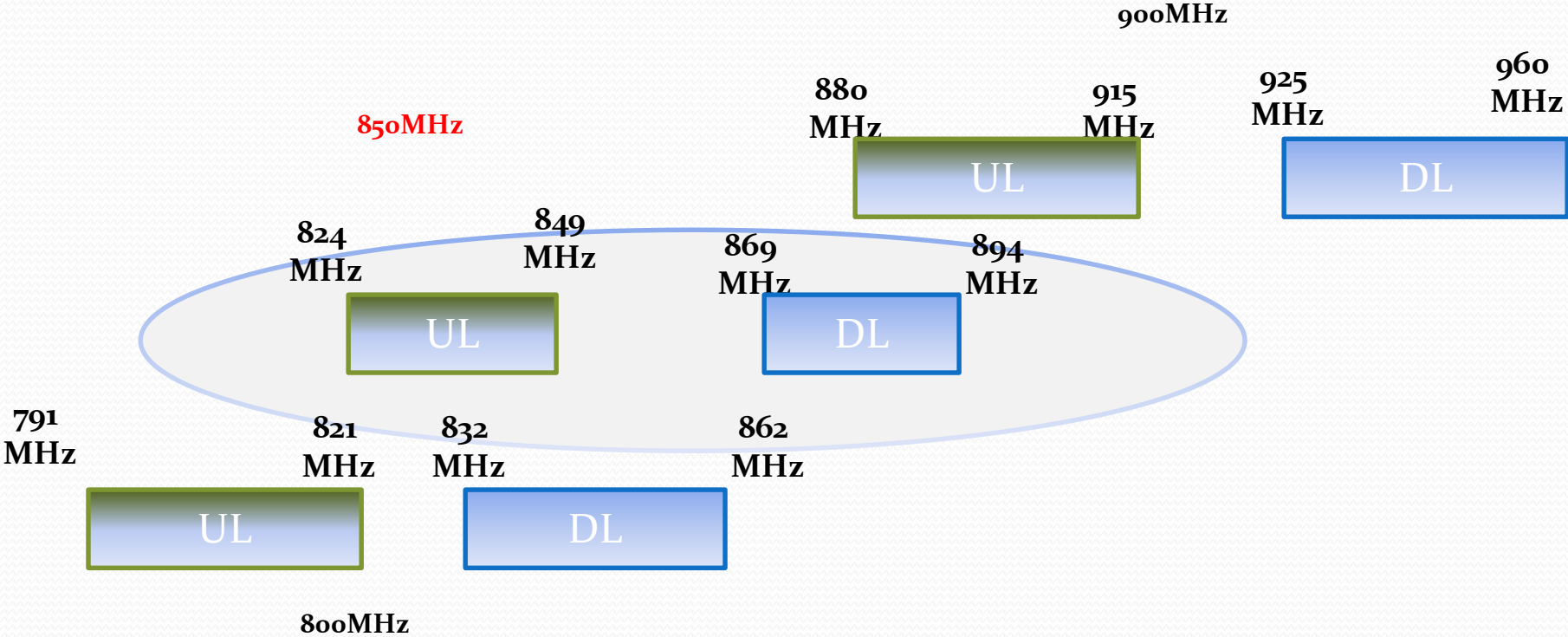
In first quarter of 2016 Zain Sudan has been awarded LTE License by TPRA, paving the way for the introduction of high speed 4G data services in Sudan. Recently Sudani has launched 4G service and MTN in Sudan also Canar awarded 4G service for Fixed services.



The historical assigned of 800 MHz band



850MHz interferes with 800MHz and 900MHz EGSM





900 band

880
MHz

UL

915
MHz

925
MHz

DL

960
MHz

800 Band

791
MHz

UL

821
MHz

832
MHz

DL

862
MHz

Band 700

703
MHz

UL

733
MHz

758M
Hz

DL

788
MHz

Settlement the Problem

The settlement by 3-steps

Step 1

- Formation of a joint committee
- Technical aspect.
- The financial aspect.

Step 2

- Adoption of spectrum allocation policies
- Allocate 700MHz &800 for LTE

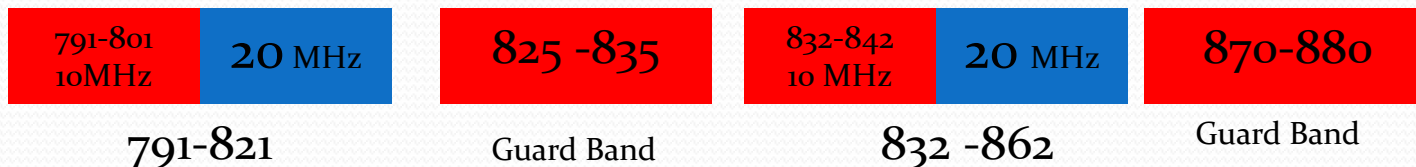
Step 3

part of Addendum and the License Agreement.

Up link	Down link	Bandwidth
791-801	832-842	2x10 MHz

The Licensee has to evacuate the rest of the frequencies in the 850 Mhz band (842-844.320) before the end of the first quarter of 2018 and is allowed to use the band (825-835 ; 870-880) for three years and six months using it for the Service starting from the effective date of this Addendum, without affecting the assigned spectrum in the 800 band

for three years
and six months

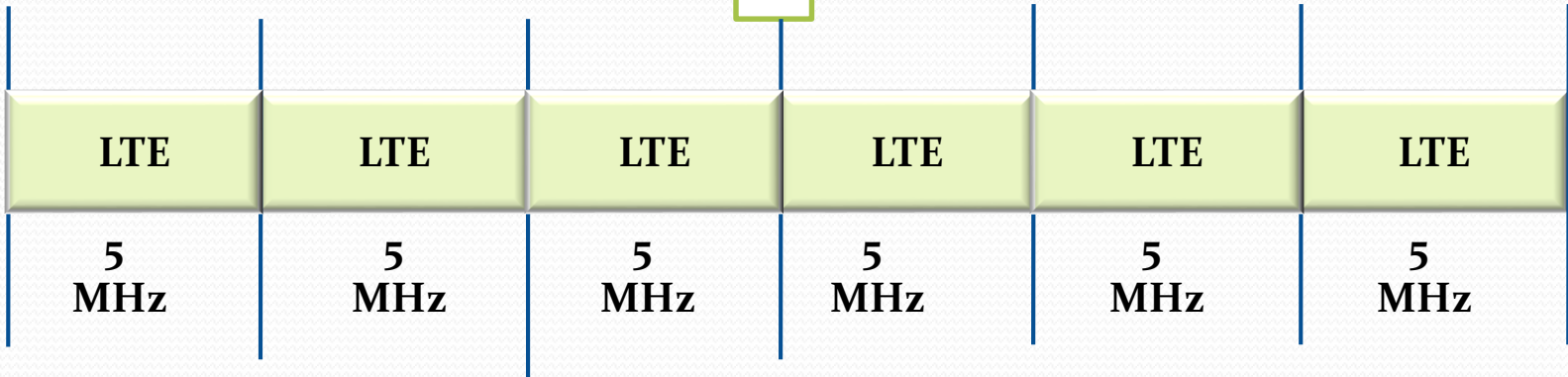


planning proposals of 800 Mhz

791
MHz

MHz 821

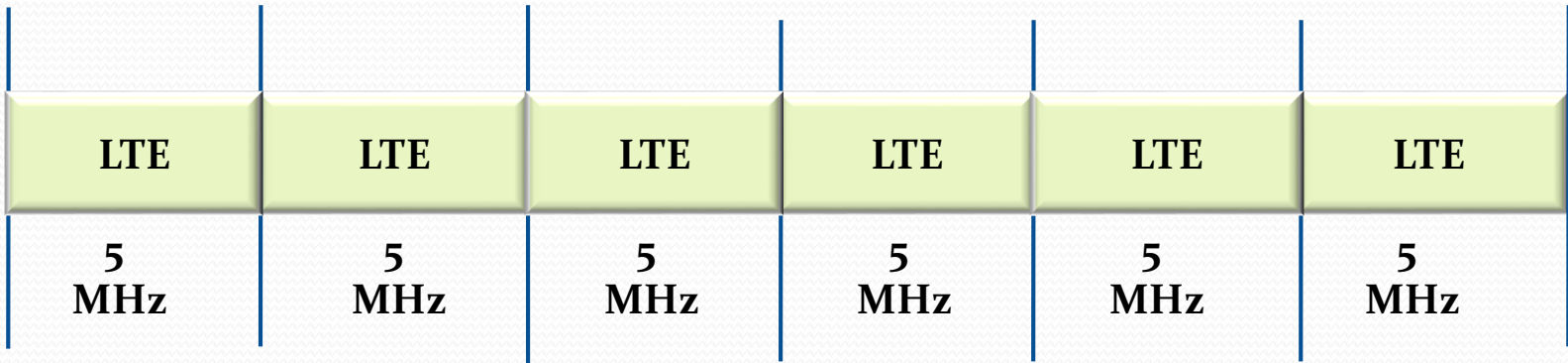
UL



MHz 832

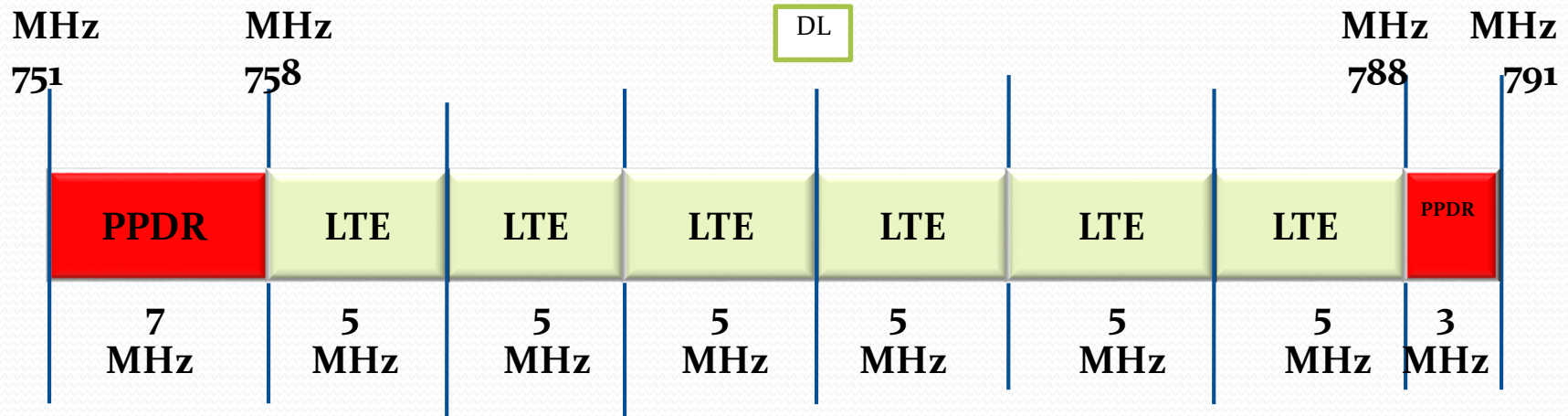
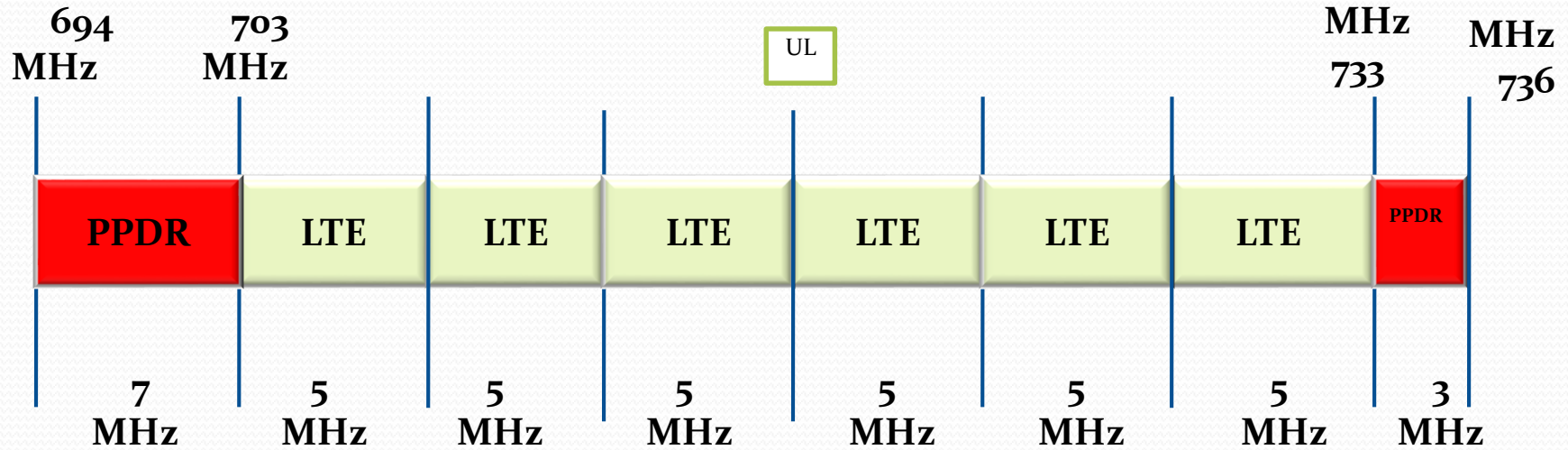
MHz 862

DL



5 MHz

planning proposals of 700





Thank You