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Semester 2 6th

Subject , Data & Com

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Polay N.R.Z

is a type A of Polay (N.R.Z) of Polay encoding.

it is uses a different voltage level is represented in binary.

Two values -

①

NRZ-L → level signal

②

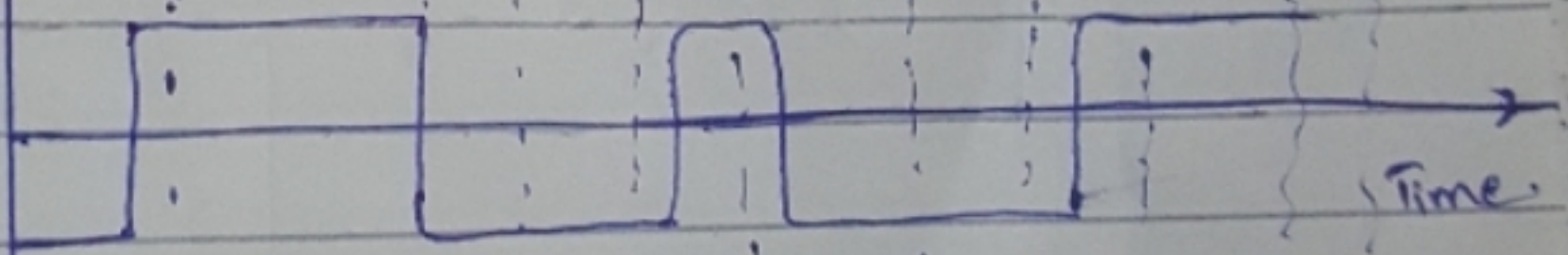
NRZ-I

↳ signal get inverted.

Amplitude

NRZ-L

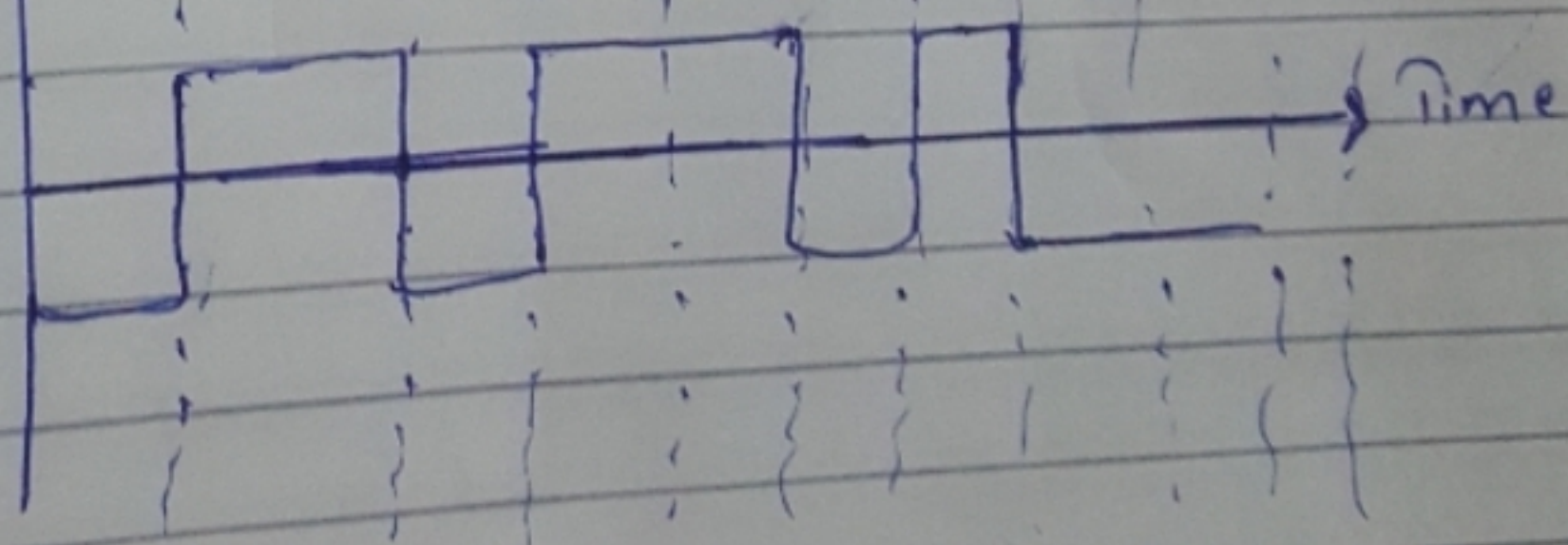
1 0 1 1 0 1 1 0 0



Time

NRZ-I

1 0 1 1 0 1 1 0 0



Time

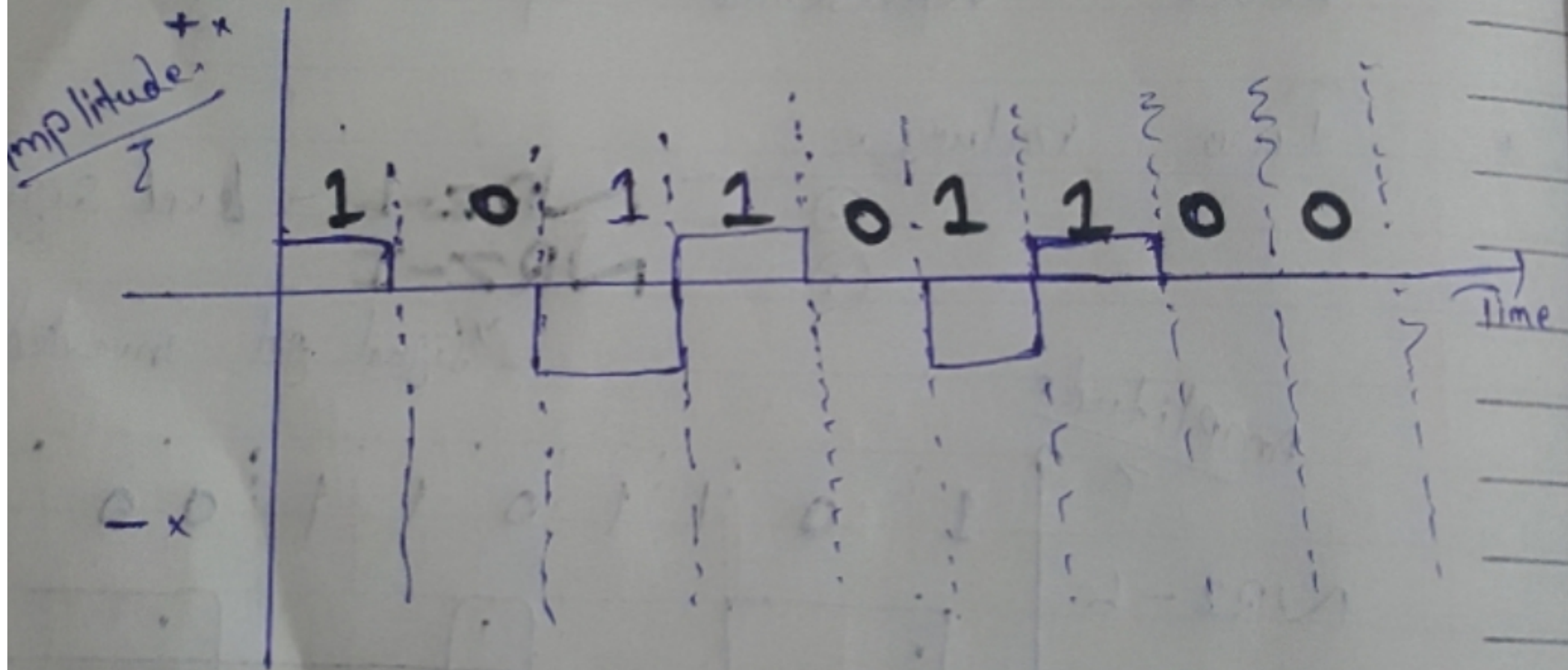
GPBLS

Biopolar

A biopolar have use 3 voltages level. (positive, -ive, and zero.)

→ Zero voltage represent binary (0).

→ and another bit represent an positive and negative.



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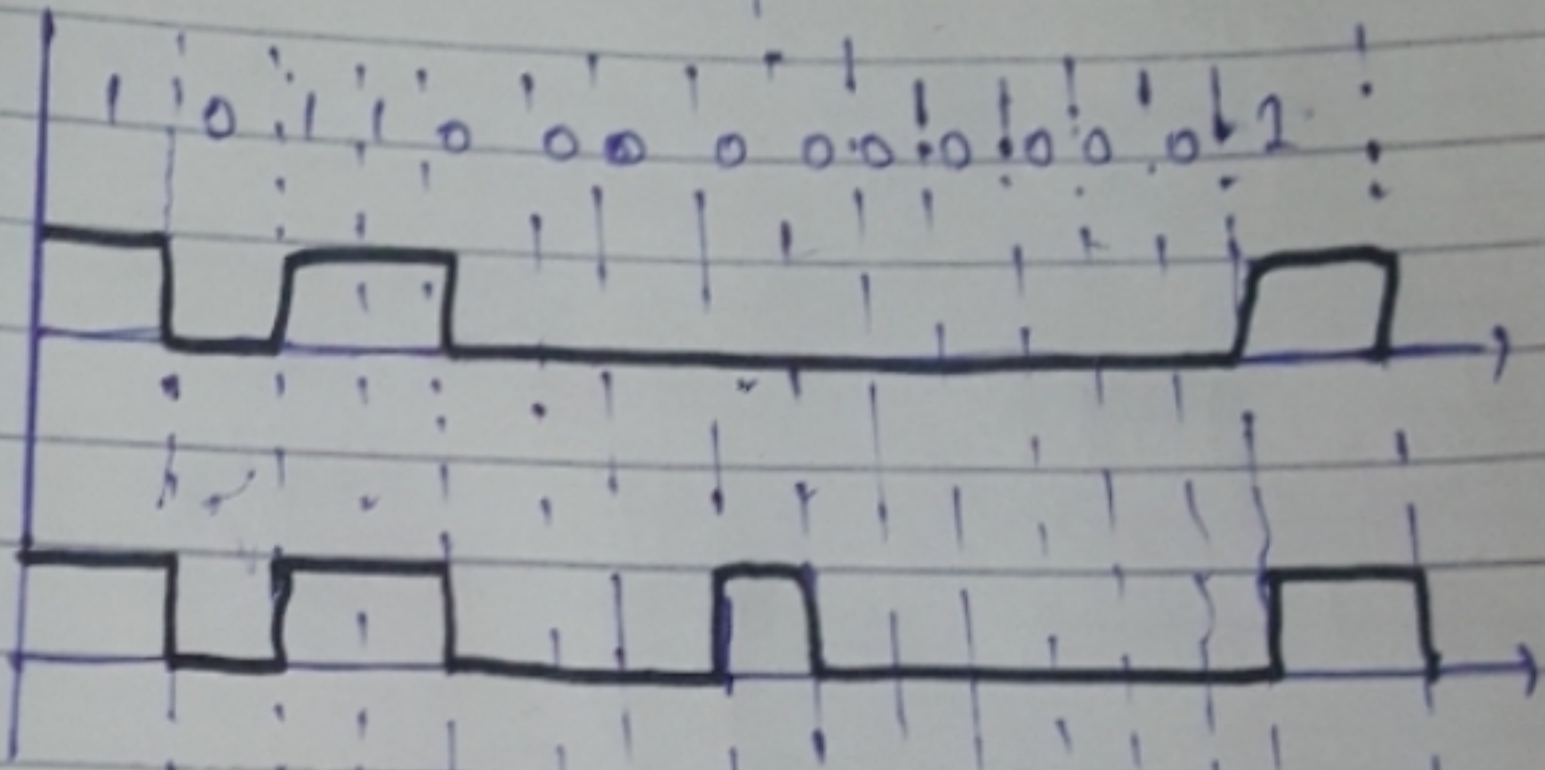
Draw binary waveform transmitting

101100000000000001

B8ZS.
HDB3.

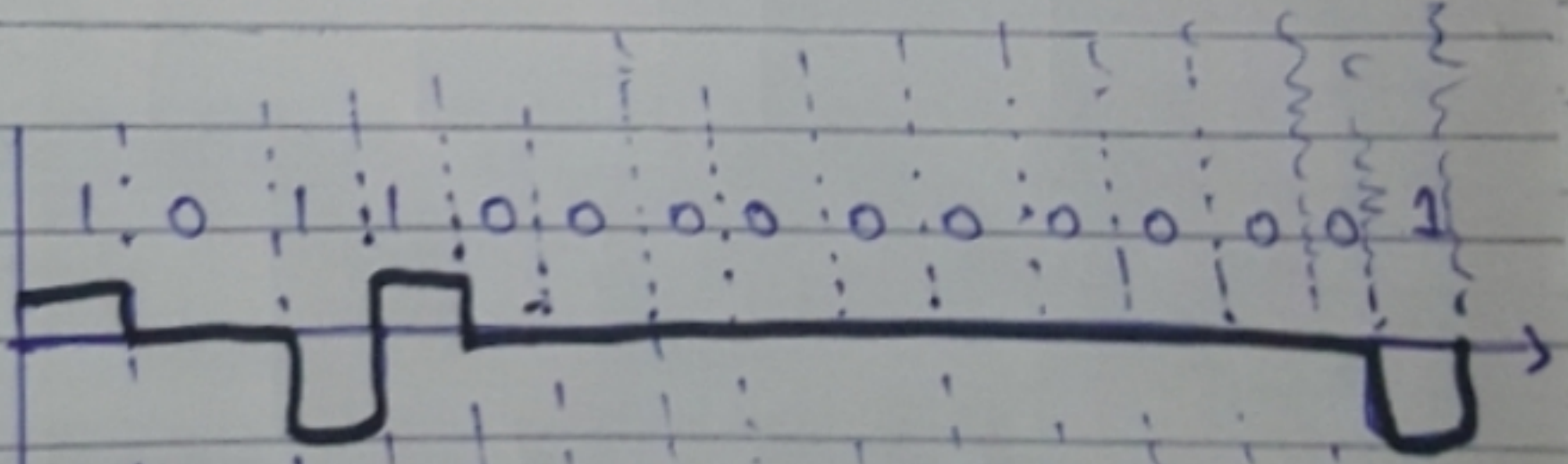
B8ZS
AMI

Peak.

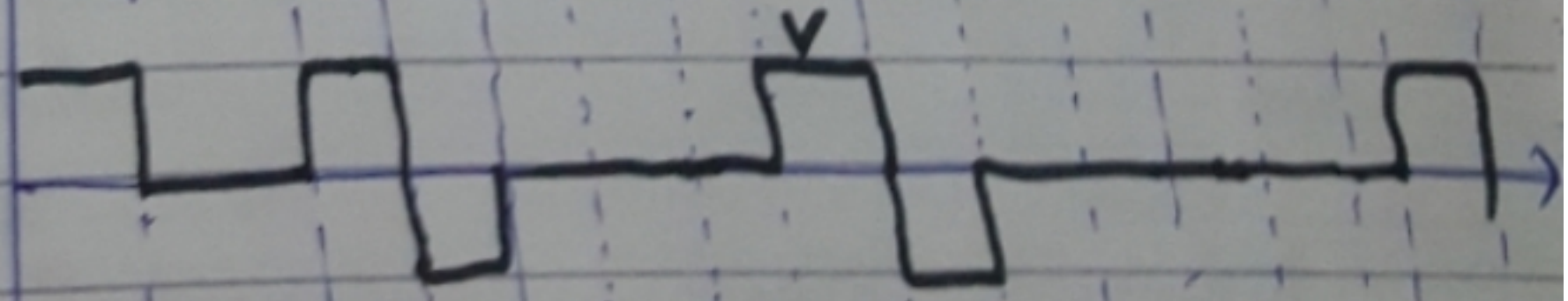


HDB3.

AMI



HDB3



Flow Control and Error Control.

The flow control and error control known as (data link control.)

Flow Control

it refers to a set of procedures used to restrict the data as ~~sent~~ to the sender can send before waiting acknowledgement.

if some one send the data to and a receiver can't take amount of data as that's all procedure is flow control.

Error Control in data link layer is based on automatic repeat request which is retransmission of data.

if some one send the data to the receiver but some error are ~~showing~~ so the sender use the "Automatic Repeat Request" (ARQ)

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Soft Hand off & Hard Hand off.

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it means that all the old radio links in MS are removed before the new radio links established.

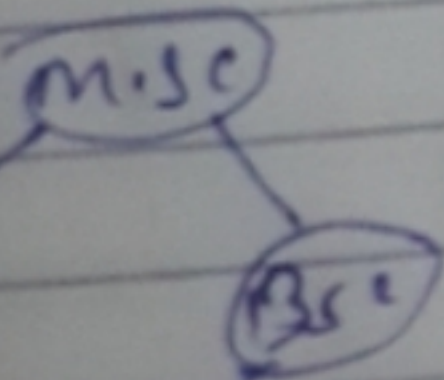
Soft hand off means the radio links are added and removed in a way that MS always keeps at least one radio link to the (LITvan)

Hard Hand off

① Break before make

② At a time only one connection is

uses costly.



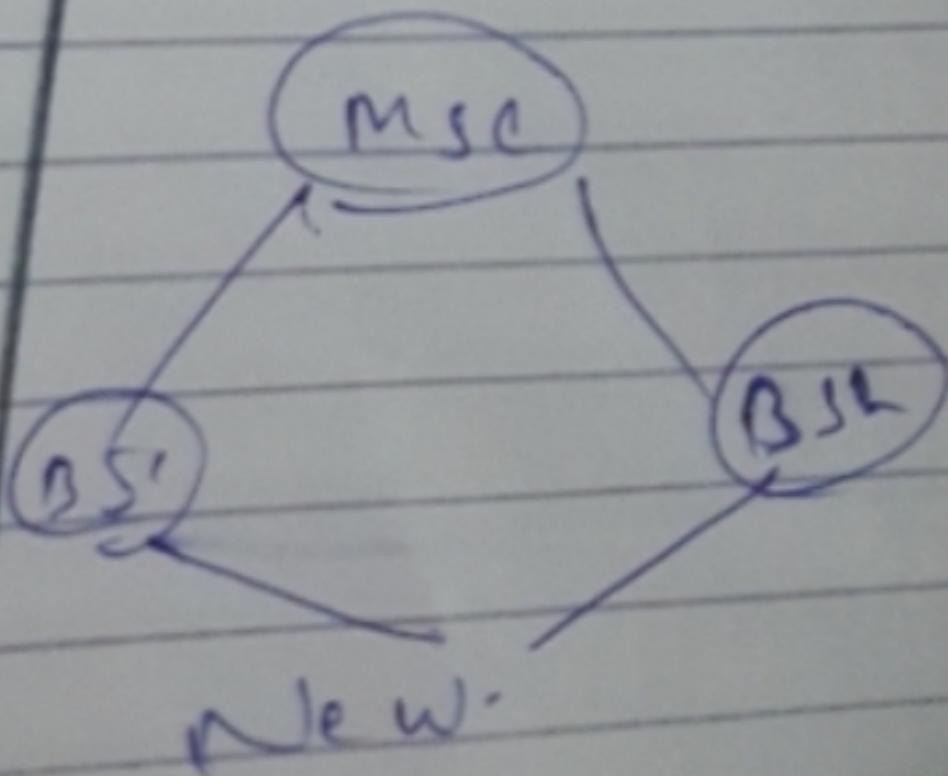
old mechanism

Soft Hand off

① Make before break

No disturbances

More costly



New.