**The USART** has to be initialized before any communication can take place. The initialization process normally

consists of setting the baud rate, setting frame format and enabling the Transmitter or the Receiver depending

on the usage. For interrupt driven USART operation, the Global Interrupt Flag should be cleared (and interrupts

globally disabled) when doing the initialization.

**20.3.1 Internal Clock Generation – The Baud Rate Generator**

Internal clock generation is used for the asynchronous and the synchronous master modes of operation. The

description in this section refers to Figure 20-2.

The USART Baud Rate Register (UBRRn) and the down-counter connected to it function as a programmable

prescaler or baud rate generator. The down-counter, running at system clock (fosc), is loaded with the UBRRn

value each time the counter has counted down to zero or when the UBRRnL Register is written. A clock is

generated each time the counter reaches zero. This clock is the baud rate generator clock output (=

fosc/(UBRRn+1)). The Transmitter divides the baud rate generator clock output by 2, 8 or 16 depending on

mode. The baud rate generator output is used directly by the Receiver’s clock and data recovery units.

However, the recovery units use a state machine that uses 2, 8 or 16 states depending on mode set by the state

of the UMSELn, U2Xn and DDR\_XCKn bits.

Practic, UBRR0H numara de la 9600in jos. Cand atinge 0 atunci scrie valoarea in ubbrr0L si genereaza un clock signal(adica transmite un pachet de date)