```
--algorithm NProcBBuf {
    variables in = Input, out = ⟨⟩,
              buf ∈ [0 .. (N − 1) → Msg], p = 0, c = 0;
    fair process ( Buffer ∈ 0 .. (N − 1) )
     { b1:- while ( TRUE )
           { await p%N = self ;
             buf [self %N] := IHead(in) ;
             in := ITail(in) ;
             p := p ⊕ 1 ;
        b2:    await c%N = self ;
               out := Append(out, buf [self %N]) ;
               c := c ⊕ 1
             }
      }
 }
```