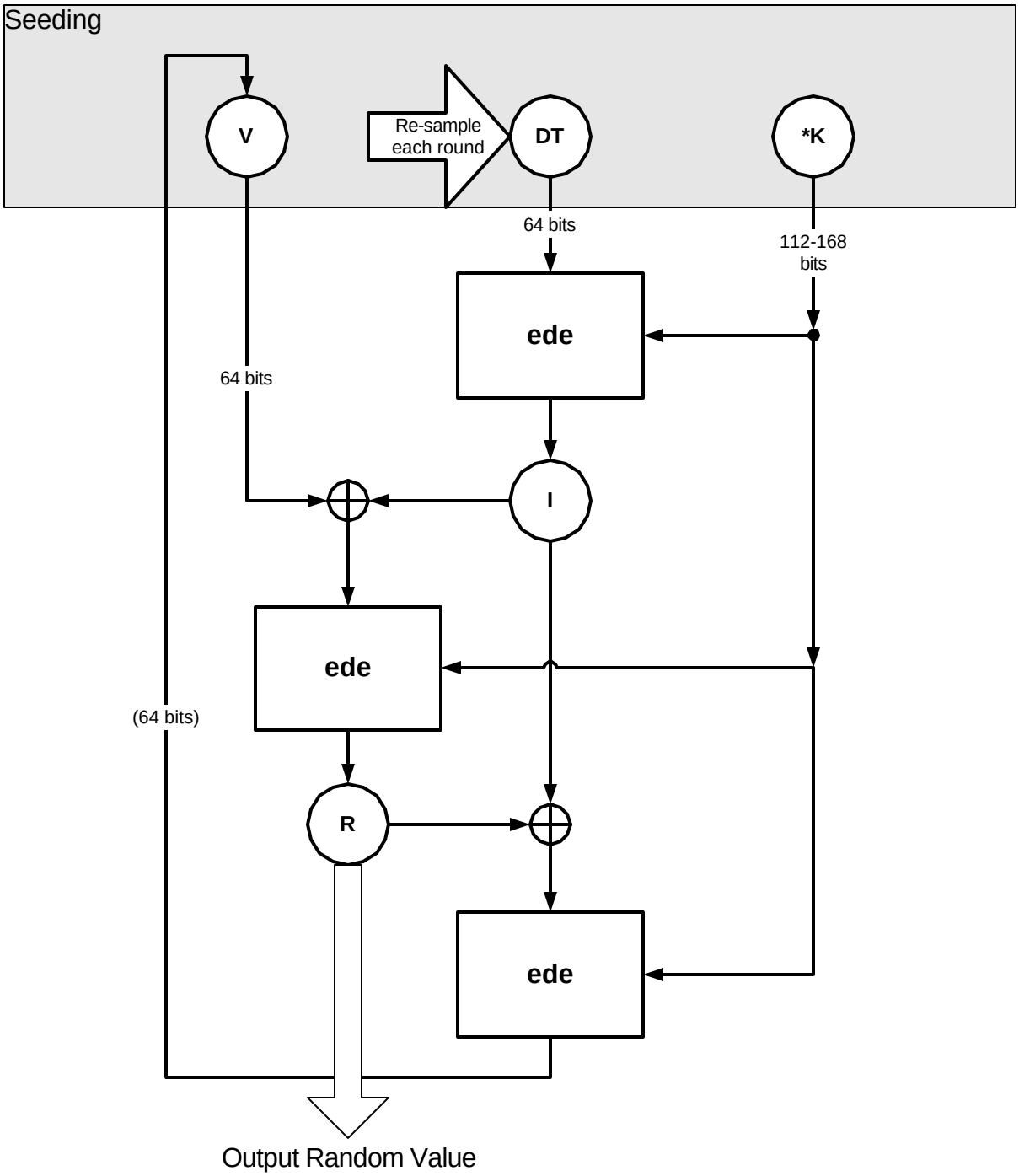
The ANSI X9.31-1998
Appendix A.2.4 PRNG



ANSI X9.31-1998 - Appendix A.2.4:

Let ede***X**(**Y**) represent the DEA multiple encryption of **Y** under the key ***X**. Let ***K** be a DEA key pair reserved only for the generation of pseudo random numbers, let **V** be a 64-bit seed value which is also kept secret, and let ^ be the exclusive-or operator. Let **DT** be a date/time vector which is updated on each iteration. **I** is an intermediate value. A 64 bit vector **R** is generated as follows:

I = ede***K**(**DT**)
R = ede***K**(**I** ^ **V**) and a new **V** is generated by **V** = ede***K**(**R** ^ **I**).

Successive values of **R** may be concatenated to produce a pseudo random number of the desired length.