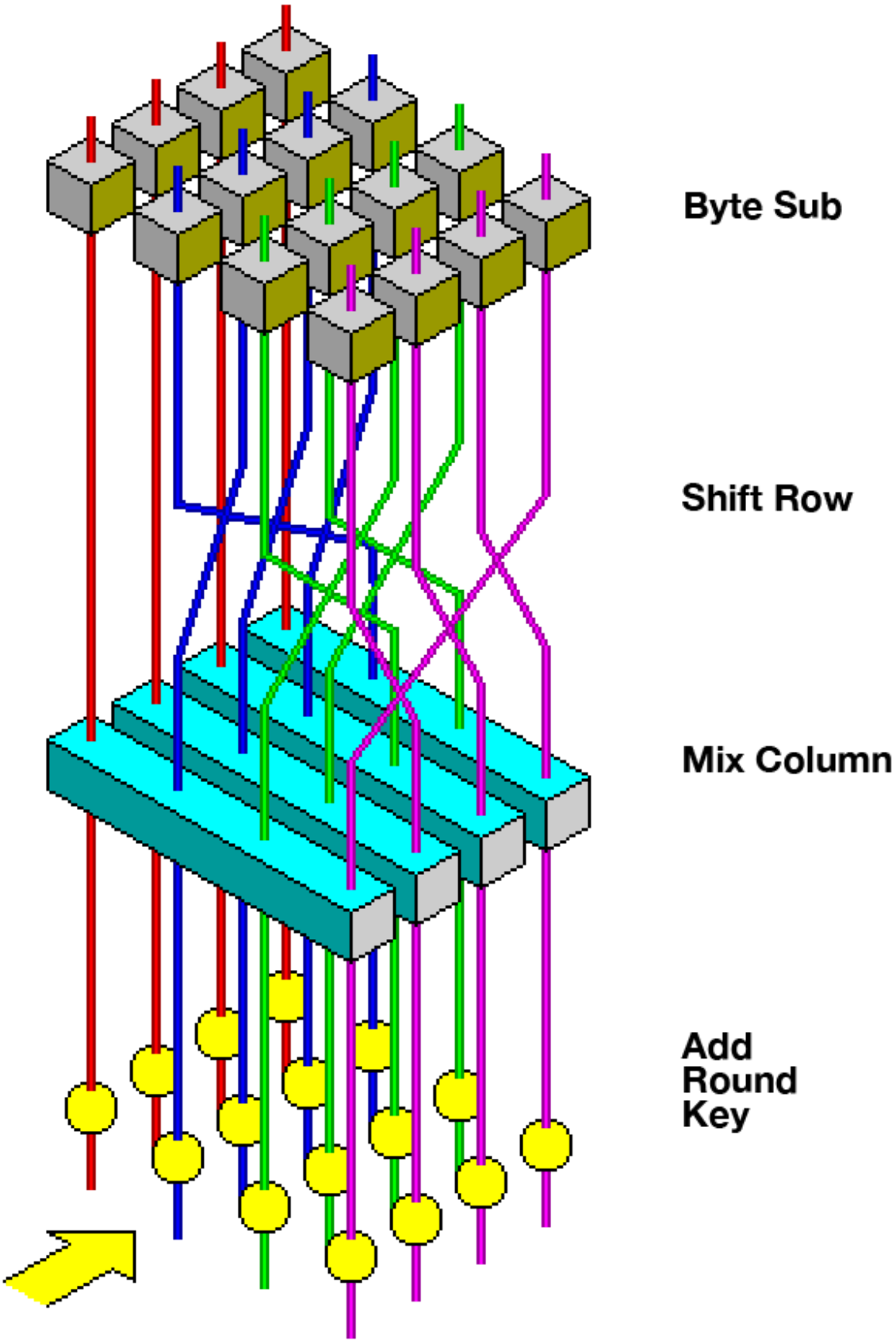
The Advanced Encryption Standard (AES)

The **Advanced Encryption Standard** (**AES**), also known by its original name **Rijndael** (Dutch pronunciation: [ˈrɛindaːl]),[5] is a specification for the encryption of electronic data established by the U.S. National Institute of Standards and Technology (NIST) in 2001.[6]

AES is a variant of the Rijndael block cipher[5] developed by two Belgian cryptographers, Joan Daemen and Vincent Rijmen, who submitted a proposal[7] to NIST during the AES selection process.[8] Rijndael is a family of ciphers with different key and block sizes. For AES, NIST selected three members of the Rijndael family, each with a block size of 128 bits, but three different key lengths: 128, 192 and 256 bits.

AES has been adopted by the U.S. government. It supersedes the Data Encryption Standard (DES),[9] which was published in 1977. The algorithm described by AES is a symmetric-key algorithm, meaning the same key is used for both encrypting and decrypting the data.

In the United States, AES was announced by the NIST as U.S. FIPS PUB 197 (FIPS 197) on November 26, 2001.[6] This announcement followed a five-year standardization process in which fifteen competing designs were presented and evaluated, before the Rijndael cipher was selected as the most suitable.


Byte Sub
Shift Row
Mix Column
Add
Round
Key