

A1. Cover sheet.

1. NUSH Block

2. Block cipher. Proposed security level:

a) *High*. Complexity of a key reconstruction equals to 10^{61} elementary operations with memory requirements for about 10^{16} blocks of ciphertext. An elementary operation is equivalent to encryption, writing to (reading from) memory and comparison of plaintext blocks.

b) *Normal*. Complexity of a key reconstruction equals to 10^{22} elementary operations with memory requirements for about 10^{16} blocks of ciphertext. An elementary operation is equivalent to encryption, writing to (reading from) memory and comparison of plaintext blocks.

c) *Normal-Legacy*. Complexity of a key reconstruction equals to 10^{22} elementary operations with memory requirements for about 10^{16} blocks of ciphertext. An elementary operation is equivalent to encryption, writing to (reading from) memory and comparison of plaintext blocks.

Proposed environment: An eavesdropper knows all the details of the algorithm, can get and write down in memory at most as many as 10^{16} different pairs of plaintext-ciphertext blocks. He can also search through the memory in an efficient way such as a dichotomic search, lexicographic search etc.

3. Principal submitter: **LAN Crypto, Int.**,

Tel.: (7095) 288.5056, Fax: (7095) 288.5388,
22 Schepkina Str., Office 22, Moscow, RUSSIA, 129090,
e-mail: lanc@aha.ru; lancrypto@mtu-net.ru
www.lancrypto.com

4. Auxiliary submitters: NO

5. Algorithm inventors: Dr. Anatoly N. Lebedev, President, LAN Crypto, Int.,
Alexey A. Volchkov, President, «RusCrypto» Association.

6. Owner: **LAN Crypto, Int.**

7. _____ / Anatoly N. Lebedev, President, LAN Crypto, Int.

8. Point of contact: Anatoly Lebedev,

Tel.: (7095) 766.8026, 288.5056, 288.5388, fax: (7095) 288.5388, e-mail: lan@lancrypto.com,
lanc@aha.ru