

# **THE SYSTEM OF DEFENCE IS THE INTERNET OF RESOURCES OF PRODUCTION AMALGAMATION**

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*Basis of the system is made by approach [1,2,3,4] virtualizations of process of the protected telecommunication.*

*Terms of virtualization:*

*1. Reports of source are  $i$ -  $m_i$  by the selections of the stationary Gausse Markoff casual process.*

*2. The reports of source are exposed to digital treatment the result of that is distorted by noise of digital presentation.*

*3. Forming of cryptograms presents the result of additive distortion of reports some noise.*

*These terms and criterion of a minimum of middle square of error allow to get expression for the algorithm of estimation*

$$\begin{cases} \mathbf{u}_{i-1}^* = (\hat{\mathbf{e}}_i^* - \tilde{\mathbf{v}}_i) \mathbf{H}_i^{-1} \mathbf{G}_{i-1}^{-1} - \left( \Phi_{i-1,i-2} \tilde{\mathbf{s}}_{i-2}^* - ((\tilde{\mathbf{s}}_i^* - \tilde{\mathbf{s}}_{i-1}^*) - (\mathbf{w}_i - \mathbf{w}_{i-1})) \right) \mathbf{G}_{i-1}^{-1} - \mathbf{n}_{i-1}, \\ \mathbf{u}_i^* = (\hat{\mathbf{e}}_i^* - \tilde{\mathbf{v}}_i) \mathbf{H}_i^{-1} \mathbf{G}_i^{-1} - \left( \Phi_{i,i-1} \tilde{\mathbf{s}}_{i-1}^* - (\mathbf{w}_i - \mathbf{w}_{i-1}) \right) \mathbf{G}_i^{-1} - \mathbf{n}_i, \end{cases}$$

*here  $\mathbf{u}^*$  - estimation of report;  $\hat{\mathbf{e}}_i^*$  - virtual cryptogram;  $\mathbf{w}_i, \mathbf{n}_i, \mathbf{v}_i$  - vectorial sequences;*

*$\hat{\mathbf{O}}_{i,i-1}, \mathbf{G}_i, \mathbf{H}_i$  - matrices of functions.*

*The distinctive feature of the schematics got from an algorithm is absence of limitations of information generator.*

*Functioning of transmitter part of the system is divided into three basic stages:*

*1) forming of virtual reports; 2) forming of the virtual keys and encipherement; 3) forming of virtual cryptograms.*

*Functioning of receiving part of complex is divided into the stages: 1) devirtualization cryptograms; 2) forming of the virtual keys and base decoding; 3) demultiplexing of decoding; 4) dual-link forming of reports (decoding); 5) estimation of reports.*

*For providing of security of process of implementation of transformations of the worked out programmatic complex and impossibility of access from the side of hardwarily-programmatic environment hardware representation of receiving and transmitter part of the system is envisaged on the base of microcontrollers.*

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