Functional scheme of the flying sensor networks architecture design

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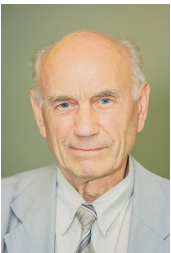**Moscow technical university of communications and informatics, Aviamotornaya str. 8a, 111024 Moscow, Russia*

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Abstract— **The process of flying sensor networks (FSN) construction is quite complicated. To date, there has been developed a number of methods and algorithms of solving separate problems arising in the process of FSN construction, but the process itself is not formalized as a rigid set of rules, algorithms and standards following which would guarantee construction of a FSN satisfying the designer's requirements. Many problems arising on the mentioned stages of FSN design are NP-complete and cannot be formalized and solved by traditional analytical methods due to fuzziness of task formulation, initial data, criteria and restrictions. In most cases one does not need to derive the optimal solution of the design task; usually the task is reduced to obtaining a spectrum of solutions satisfying design criteria and to selection of an optimal one among them, with interactive participation of the designer in the process of decision making. In this work we propose the functional scheme of the FSN architecture design, which can be the basis for a specialized design support system of flying sensor networks.**

Keyword— **flying sensor networks, architecture construction, design support systems.**

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