

# Methods for Optimizing the Process of Transition to New Technology for High-Tech Products

**A.V. Leonov**<sup>1</sup>, FSBI 46 Central Research Institute of RF Defense Ministry, Prof. Dr., alex.clein51@yandex.ru

**A.Yu. Pronin**<sup>2</sup>, FSBI 46 Central Research Institute of RF Defense Ministry, Assoc. Prof. PhD, pronin46@bk.ru

<sup>1</sup> Leading Researcher, Moscow, Russia

<sup>2</sup> Deputy Head of Department — Head of Laboratory, Moscow, Russia

**Citation:** Leonov A.V., Pronin A.Yu. Methods for Optimizing the Process of Transition to New Technology for High-Tech Products, *Kompetentnost' / Competency (Russia)*, 2022, no. 2, pp. 3–11. DOI: 10.24412/1993-8780-2022-2-03-11

## key words

innovative and technological development, science-intensive industrial products, methods for evaluating, promising products

In the article we have considered the methods for optimizing the transition from traditional technology to a new one in the face of uncertainty about the progress of its development, as well as the scope of these methods in justifying the creation of promising science-intensive industrial products. In order to do this, we have used the general model of technology development and modern methods of their evaluation.

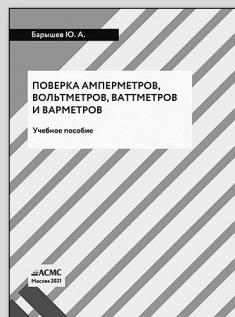
We have found out that the arsenal of methods for optimizing the process of transition to a new technology in conditions of uncertainty of information about the course of its development allows us to consider possible directions for using these methods in justifying the creation of promising products of high-tech industrial products. Optimization methods allow you to choose the desired method and formalize it for the joint use of existing and new technologies (including artificial intelligence technologies) in the design of high-tech industrial products; to solve problems related to assessment the level of modernization (unification) of complex equipment, taking into account the relationship between its modernization and unification potentials. Thus, it is possible to increase the sustainability of the economic dynamics of the creation of high-tech products in government programs, manage and predict them, taking into account possible risks.

## References

1. RF President, List of instructions following the results of the meeting on the issue of diversification of the military-industrial complex on November 21, 2018; <http://www.kremlin.ru/acts/assignments/orders/59448> (acc.: 12/23/2019).
2. Leonov A.V., Pronin A.Yu. Ekonomicheskaya dinamika sozdaniya vysokotekhnologichnoy produktsii: teoriya, metodologiya i praktika [Economic dynamics of creating high-tech products: theory, methodology and practice], Moscow, *INFRA-M*, 2021, 292 P.
3. Wald A. Posledovatel'nyy analiz [Consistent analysis], Moscow, *Fizmatgiz*, 1960.
4. Belen'kiy V.Z. Optimizatsionnye modeli ekonomicheskoy dinamiki: ponyatiyny apparat; odnomernye modeli [Optimization models of economic dynamics: conceptual apparatus; one-dimensional models], Moscow, *Nauka*, 2007, 259 P.

## НОВАЯ КНИГА

**Барышев Ю.А.**



## Поверка амперметров, вольтметров, ваттметров и варметров

Учебное пособие. — М.: АСМС, 2021

Учебное пособие предназначено для самостоятельного изучения методики поверки амперметров, вольтметров, ваттметров и варметров.

Оно может быть рекомендовано при проведении работ по калибровке приборов. Пособие рассчитано на квалификацию слушателей, обучающихся по программе «Поверка и калибровка средств электрических измерений».

**По вопросам приобретения обращайтесь по адресу:**

Академия стандартизации, метрологии и сертификации (АСМС), 109443, Москва, Волгоградский пр-т, 90, корп. 1.

Тел. / факс: 8 (499) 742 4643. Факс: 8 (499) 742 5241. E-mail: [info@asms.ru](mailto:info@asms.ru)