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Overview of Physics Aspects of Different Transmutation Concepts

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The proposed nuclear reactor-based and accelerator-based transmutation concepts are summarized in this report, based on reply to the request of information on proposed concept to about 30 specialist working for transmutation in the United State of America, European countries, Russia and Japan. The task force reviewed the concepts,and followings were recommended for tasks of Phase-II;

(1) Benchmarks for a set of common transmutation system model on calculation methods,
(2) Effect of transmutation rate on radiotoxicity reduction,
(3) Safety features of transmutation systems, and
(4) Nuclear data of transmutation nuclides.

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