社会資本ストックの管理運営技術の開発（新規）

Development of Maintenance Management Technology for Infrastructure and Building Stocks (New)

最終処分場に占める廃棄物の26%が建設廃棄物であり、不法投棄量の60%は建設廃棄物である。再資源化等率の目標値である95%に対して、リサイクル率は土木で91%、建築で73%にとどまっている。高度成長期を通じて、大量に建設・供給されてきた施設の劣化や陳腐化等による更新需要は、近年中に集中的に高まると予想され、このまま更新されれば財政事情を悪化させ、また廃棄物の最終処分場が逼迫するなど環境制約が顕在化し、不法投棄等の社会問題を引き起こす可能性もある。一方、これら大量に建設・蓄積された施設は、地域における社会資本ストックを形成し、国民生活や経済活動を支える重大な役割を担っている。

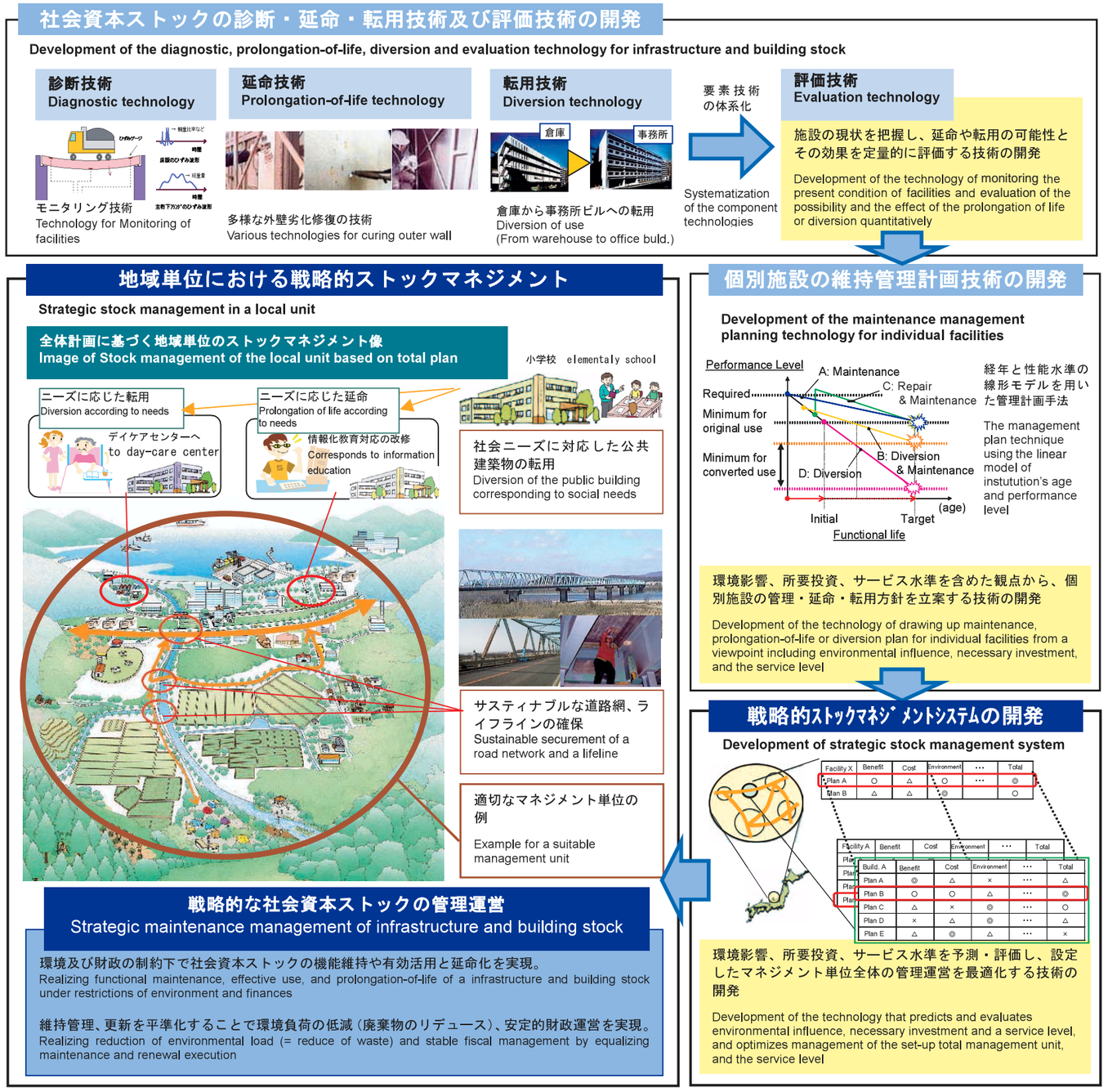
そこで、本プロジェクトでは、国・地方の財政事情を勘案し、廃棄を抑制する取組み（リデュース）を行いつつ、社会資本ストックの機能及びそのサービス水準を維持してゆくため、全ての施設の構造的劣化や社会的陳腐化の実態および多様な維持管理・更新手法の適用による機能向上効果を適切に評価・予測した上で、環境、財政制約を踏まえ最も合理的に社会資本ストックを管理運営する手法を評価・選択するための「戦略的ストックマネジメント計画システム」の開発を行う。

26% of the waste at final disposal sites is from conscruction work including demolition, and 60% of the amount of illegal abandonment is from construction work. To improve this state, ministry of land, infrastructure and transport set up the target rate of recycling of the waste by construction to 95%. However, the rate in building construction or civil work is still only 73-91%.

It is expected that the renewal demand by degradation, obsoleting, etc. of facilities, which have been built and supplied in large quantities on the high-growth era, increases intensively in a few decades. If renewaled as it is, a financial situation may be worsened, and environmental restrictions, for example, the final disposal sites of waste will be full, may actualize, and social problems such as illegal abandonment may be caused. On the other hand, these facilities built and accumulated in large quantities form the infrastructure and building stock in a district, and support the life of the people or an economic activity.

Then, the Reseach Project for "strategic stock management planning system" is launched. The system will take consideration the financial situation of a country or a region, and it will make it possible to maintain the function and its service level of infrastructure and building stock, taking the measure which controls dispose of waste.

In this system, the actual condition of structural degradation or social obsoleting of all facilities and the improvement effect in functional by application of the various maintenance management or updating techniques will be able to be evaluated and predicted appropriately. Moreover, this system will be able to evaluate and choose the technique of carrying out maintenance management for the infrastructure and building stock most rationally under environmental or financial restrictions.



担当●国土技術政策総合研究所　総合技術政策研究センター建設経済研究室　岩田室長　0298-64-2211（内3751）
Person in charge: Dr. Iwata, Head, Socio-economic Reseach Division, Research Center for Land and Construction Management, NILIM 0298-64-2211 (extension 3751)