C.T. HYUN, Y.W. CHA, R.Z. JIN, M.J. SON. ***Change and contract management modules of intelligent-program management information systems (i-PgMIS) for urban renewal projects.*** *Gerontechnology 2012;11(2):172;* doi:10.4017/gt.2012.11.02.419.00 **Purpose** In recent times, urban renewal (UR) projects actively try to improve residential environments and recover functions of an urban infrastructure. These projects move forward simultaneously as multiple projects, rather than as one single project. To cope with this, program management techniques and a comprehensive management system which is based on these techniques are required. For this purpose the research team has developed an intelligent program management information system, i-PgMIS, that can efficiently manage and support urban renewal projects during the entire life cycle. **Method** The system provides cost management, duration management, risk management, performance management, green VE/LCC (Value Engineering/Life Cycle Cost), change management, contract management, an e-manual, and conflict management for UR-projects. This paper details the research that focuses on the change management and the contract management modules. Motawa et al.[1] proposed a change management system for construction projects at project level by using the dynamic planning system based on fuzzy logic, and Zhao et al.[2] proposed a prediction change management system for each activity at the construction phase by using the dependency structure matrix (DSM). In this study, change factors that commonly occur in UR-projects were first deducted by using the analytic network process (ANP), and the possibility of the change was estimated by using a Likert-scale. There is no specific method in the contract management module. The module focuses on how to manage contractors' information, the collection of the contract documents, execution of the costs referred to in the contract documents, and so forth. **Results & Discussion** Since many changes take place and multiple contracts are signed during the progress of a mixed-use development project such as urban renewal projects, efficient management is essential to handle these projects successfully. It is expected that the project manager is able to efficiently manage contract duties and respond to a number of changes such as cost overrun and schedule delay during the project through the change management and contract management modules, as developed in this paper.

References

1. Motawa IA, Anumba CJ, Peña-Mora F. An integrated system for change management in construction. Automation in Construction 2007;16(3):368-377; doi:10.1016/j.autcon.2006.07.005
2. Zhao ZY, Lv QL, Zuo J, Zillante G. Prediction System for Change Management in Construction Project. Journal of Construction Engineering and Management 2010;136(6):659-669; doi:10.1061/(ASCE)CO.1943-7862.0000168

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Affiliation: University of Seoul, Seoul, South Korea; *E:* runzhijin79@hanmail.net
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Figure 1. Estimation of the change possibility