

人の暮らしと自然の ICT に基づいた共生へ向けて 「Kurihara」 グリーンプロジェクト

白鳥 則郎^{†1} 橋本 和夫^{†2}
菅沼 拓夫^{†3} 高橋 秀幸^{†1}

Towards Symbiosis between Human's life and Nature via Information Communication - ' Kurihara 'Green Project -

NORIO SHIRATORI ,^{†1} KAZUO HASHIMOTO ,^{†2}
TAKUO SUGANUMA ^{†3} and HIDEYUKI TAKAHASHI ^{†1}

The ' Kurihara ' Green Project is aimed to create "Symbiosis between Human's life and Nature via Information Communication". This is a Ministry of Internal Affairs and Communications project with a budget of 250 million yen for 2010. Along with Tohoku University, NTT East, NTT Facilities, Hitachi and Miyagi prefecture's Kurihara city are involved in this project and Professor Shiratori is the leader.

Our goal is to conduct a real-world experiment in the community based field to test the technical specification of necessary communication protocol, to realize network inte-

grated control system aimed at community development to reduce environmental burden in the wide-area distributed community. Two themes have been considered, which will be achieved by the symbiosis between natural environment and human by integration of wide-area distributed community. In theme-1, wide-range cooperation-type utilization of network integration control system for symbiosis between environment and human. Theme-2 is an efficient network management system for reducing environmental burden of wide-area distributed community. Kurihara city is our experimental field, our demonstration area. There are special characteristics of Kurihara city. Human inhabitants are scattered around the entire city area including some in mountainous places. The sub-offices of this city are also far from each other. It is a perfect example of distributed system and so an ideal location to test our system.

Currently, we are observing different types of crisis around the world - political conflict, both international and regional; social problem caused by dwindling birthrate, aging population and nuclear family; environmental pollution; collapsing of long lasting social model; and the fall of capitalist market strategy. We cannot solve these crises by addressing a single problem. We have to take care considering the overall situation and their political, social and environmental aspects.

In our view, it can be done through Information technology, by harmony and symbiosis between human, technology and nature. Symbiotic computing is the factor that is missing in the present approach. Symbiotic computing combined with ecology consciousness will take us to the world we are wishing for, where elderly people will be able to live comfortable life without feeling anxious and insecure. And the children in our society can look forward to a better and Greener future. This is our concept of human-nature symbiosis.

謝辞 本研究の一部は、総務省平成 21 年度第 2 次補正予算「ネットワーク統合制御システム標準化推進事業」委託課題「宮城県栗原市における通信プロトコル等検証のための地域実証」の援助を受けて実施した。

参 考 文 献

- 1) Symbiotic Computing Webpage, <http://symbiotic.agent-town.com/>

^{†1} 東北大学電気通信研究所
Research Institute of Electrical Communication, Tohoku University
^{†2} 東北大学情報科学研究科
Graduate School of Information Sciences, Tohoku University
^{†3} 東北大学サイバーサイエンスセンター
Cyberscience Center, Tohoku University