

Editorial:

Rob Buckley Editor

robertbuckley@geoconnexion.com

Alan Plumley News Editor

[t] +44(0) 1438 715124

news@geoconnexion.com

Correspondents and Contributors:

Werner Kuhn, Germany

Tom Poiker, Canada

Craig Schwabe, Africa regional

Kevin Pomfret, Brussels / USA

Publisher

Mai Ward

[t] +44 (0) 1223 279151

[f] +44 (0) 1223 279148

maiward@geoconnexion.com

Advertising:

Micki Knight, Sales & Marketing Director

[t] + 44 (0)208 838 0728

[m] +44 (0) 7801 907 666

mickiknight@geoconnexion.com

Mailing Address &

Subscription Enquires:

GeoConnexion Limited,

PO Box 594, Cambridge, Cambs.

CB1 0FY, United Kingdom

[t] +44 (0) 1223 279151

[F] +44 (0) 1223 279148

[E] info@geoconnexion.com

[E] subscription@geoconnexion.com

www.geoconnexion.com

Design:

Burnthebook Design

geoconnexion@burnthebook.co.uk

All extracts of Ordnance Survey mapping data illustrated in this magazine are © Crown copyright and are reproduced with permission. Media licence 178/00

GeoConnexion International

ISSN: 1476-8941 is published by GeoConnexion Limited ten times a year (with combined November/December and July/August issues) and is fully protected by copyright. Nothing in it may be reprinted or reproduced wholly or in any part without the written permission of the editor.

ROB BUCKLEY

EDITOR

robertbuckley@geoconnexion.com



CITIES OF THE FUTURE

GEOSPATIAL TOOLS AND STANDARDS WILL BE NEEDED TO HELP BOTH DECISION-MAKERS AND CITIZENS TO CREATE TOMORROW'S URBAN AREAS

Even the newest of towns and cities, once designed perfectly by their planners, begin to change over time. People, with all their imperfections and unpredictable wants and needs, will start changing the areas where they live and work. Often the changes will be organic, evolving over time, with barely anyone noticing: commercial buildings will get converted for residential purposes; a good school in one area will suddenly attract new parents, leaving old areas empty; rich areas may lose their appeal if there's an upsurge in crime. Before anyone knows it, new roads, utilities and public services will need to be built and provided to cater for the changes.

The question is how much these changes can be planned for. Public policies can often have completely unpredictable results that can only be seen in the long-term. In this issue, for example, three members of France's INRA compare two similar cities in the Mediterranean Basin. Avignon in France and Constantine in Algeria have both evolved considerably over the past 30 years, with urban sprawl affecting both. However, the policies put in place to deal with this sprawl and plan for the future have been very different, with Constantine stakeholders even building a second city to provide room for new residents.

To determine how well policies have worked and how much they've affected farmland and natural areas around the cities, Michel Mouléry, Esther Sanz Sanz and Claude Napoléone used Landsat imagery to compare changes over time, and on page 40, they reveal the results of their work.

But all policies have to start somewhere and getting the approval of a city's citizens is one of the first steps that planners usually have to go through. However, demonstrating how current and future developments will look as the result of a scheme, and then getting citizens to embrace that change isn't easy.

The City of Stockholm decided to take the innovative step of creating a 3D interactive model that could be displayed on a touch table. Provided in both a fixed exhibition and a mobile pavilion, the model shows the full 500 square kilometres of Stockholm and how the city will evolve over time. On page 36, Aude Camus explains how the model was created and automatically

generated by just five people in a year, using existing data sources and aerial photographs. With Stockholm so close to the water, automated systems had trouble stitching images together and new algorithms had to be developed to complete the work.

Often, with such 3D models, citizens and planners will want to know how a building is being used, not just where it is and how high it is. Including façades in models can help but at the moment, there are no standard approaches for addressing the many complexities of 3D geodata visualisation. As a result, urban planners often have difficulty viewing diverse 3D data sources together.

On page 23, Scott Simmons and Ron Exler report on a new OGC 3D Portrayal Service standard that is set to be adopted this year. The service provides a common interface for web-based 3D portrayal and potentially could be used for navigating scenes, retrieving feature information and analysing simulation results.

These kinds of services need to be paid for, however. Another new tool – Costing and Financing of Land Administration Services (CoF-LAS) – produced by FIG partner GLTN may help here. Based on the 'fit for purpose' principle, it's intended to help build cost-effective and sustainable systems that identify the way land is occupied and used, and accordingly provide for secure land and property rights. On page 26, FIG explains the history of its development and what it offers countries that adopt it.

In this issue, we also look at another industry that could benefit from geospatial technology innovation. Until now, for various reasons, healthcare has adopted far less geospatial technology than other industries. On page 31, Hamish Robertson and Nick Nicholas argue that suppliers have to pick the right moment to offer their solutions if they are to be taken up – and in many countries, that moment is now.

I hope you enjoy the issue.

If you have a comment or wish to express your views on anything in this issue or in the world of geospatial information, then please email me at robertbuckley@geoconnexion.com with Letter to the Editor in the Subject line. Please start your email with Dear Editor and the chances are your letter will appear in the Letters to the Editor page.