

## MAPPING DATA AND INFORMATION SYSTEMS

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# Automated Production of Geoscientific Map Series at the Bavarian Environment Agency

Within the project "Information Offensive Shallow Geothermal Energy" which is carried out at the Bavarian Environment Agency (LfU) since early 2008 a huge amount of geoscientific data is collected. One objective of this project is to provide PDF maps to public and experts showing the aspects of the collected geoscientific data. To reach this goal as soon as possible the map production system (ArcGIS 10) was extended with a set of tools to configure and export map sheet line - oriented map series. This poster presentation shows briefly the workflow and the main tools of the so-called „map generator“ considering the realisation of the map series "General Soil Map of Bavaria, 1:25.000 (UEBK25)".

### Map Generator

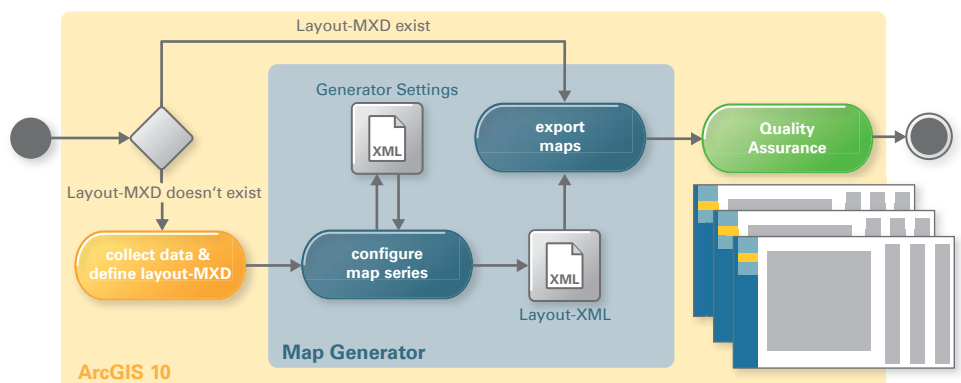
- Based on GISCON's ArcGIS extension KTS 2.0\*
- Highly enhanced by LfU requirements
- ArcGIS Add-In concept
- Based on ArcObjects technology
- Modular architecture



### Pros & Cons

- New quality level: automated map series
- Less individual cartographic work
- More conceptual cartographic work
- Preparation and configuration is time consuming
- Once configured map export can be run at any time
- Generic concept for many thematic map series

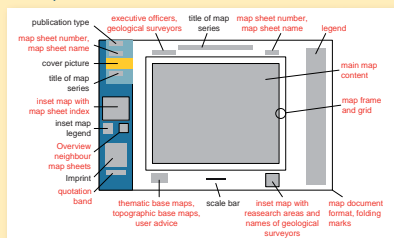
### Workflow



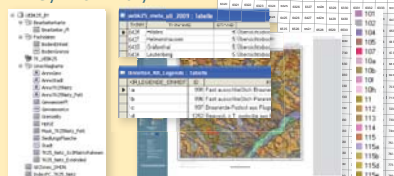
## The General Soil Map of Bavaria, 1:25.000 - Three Steps to an Automated Map Series

### 1 Layout-MXD & Basic Data

- Define a layout-MXD with all static and dynamic map elements

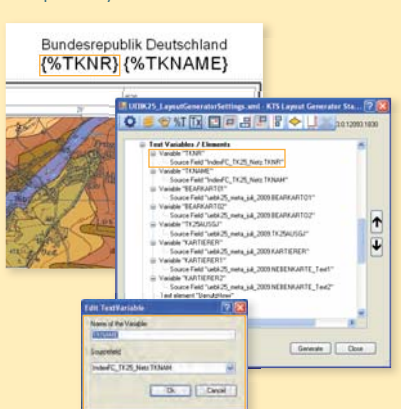


- Collect and prepare spatial and nonspatial data:
  - Index feature class
  - Spatial database
  - Metadata
  - Geoscientific legend
  - Symbol library



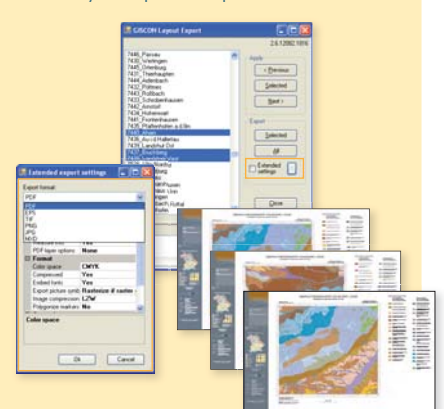
### 2 Configuration

- Use the layout generator and special tools
- Configure basic settings, dynamic map elements (data frames, texts, tables, raster graphics, map frames, legends), dynamic definition queries, dynamic document format and layout rules
- Save, load and edit configuration settings as XML
- Export a layout-XML



### 3 Map Export

- Use the layout export tool
- Load layout-XML
- Select a number of different map sheets
- Define an output format (.mxd, .pdf, .tif, .jpg ...)
- Export maps at the push of a button
- Keep an eye on the log status
- Check your exported map documents



\* KTS is the german acronym for "KartenToolSet" meaning "Map Production Tool Set" in English