

Spatial highlights of the digital framework supporting the Environmental Planning Act (DSO)

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SUMMARY

In 2022 a new Environmental Planning Act, the ‘Omgevingswet’, is planned to go into effect in The Netherlands. This is a major legal operation which replaces many existing laws. A new digital framework - the ‘Digitaal Stelsel Omgevingswet (DSO)’ - is set up to support citizens, companies and government with planning and management of the physical environment. Kadaster and Rijkswaterstaat are two of the development partners. DSO combines legal rules, business rules and geometry in a system of software components and services. These concepts are used to provide end users – citizens and companies – answers to the question if they need permission from the government for their activities with impact on the environment (like building, demolishing, draining waste water). DSO also supports the application for a permit, based on the relevant business rules for the specific planned activity on a specific location.

One of the main innovations is the complete geo-coding of legal documents and rules. All documents and rules applicable for spatial planning will be geocoded and made accessible to the public. This makes it possible to interact with legal documents in new ways and makes it possible to show specific rules to the user instead of showing an entire legal document.

Additionally, the geocoded documents and rules will be integrated with business rules management. Local governments do not only need to set up land use regulations in legal documents, but they are also responsible to set up business rules based on these regulations. The business rules are used by the system’s rule engine to provide end users with a decision. Legal rules and business rules can share concepts like activities and geometry. When executing the business rules, the geometry information object attached to the legal rules is used to provide the end user in the DSO portal a decision based on the legal requirements at a particular location. In case the conclusion is reached that the end user should apply for a development permit, the portal continues to facilitate this

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process.

DSO will enable citizens and companies to plan their development activities and guide them through the permit application process with minimum effort, using automated decision making combining both legal rules and geo-information.

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