

Digital Submission Challenges and Opportunities with the Next Generation Parcel Fabric

Brandon Tourtelotte and Timothy Fella (USA)

Key words: Cadastre; Digital cadastre

SUMMARY

Digital submission refers to the collaboration between the surveying community and land authorities whereby survey and cadastral plans are submitted in a digital format in lieu of paper and PDFs. Leveraging a digital workflow for the submission of survey and cadastral plans is expected to result in significant time savings and efficiencies as well as improved data access.

Whereas digital data is certainly more shareable and discoverable, the real value and return on investment is in the upfront self-validation of survey data prior to submission using identity, rules-based engines, data standards, and automation. This is expected to reduce the likelihood of errors and the associated back office examination time as all submissions will have been validated upfront before submitting to a web-based portal for retrieval. Surveyors are also expected to benefit from shorter examination times and the ability to access any pre-existing data (e.g. survey marks, traverse and radiation observations, title boundaries, easements, restrictions and administrative details) that may be used to start a new survey.

Digital submission is one of the many innovative functionalities supported as part of the next generation Parcel Fabric within ArcGIS. Through the use of web services and integrations with business partners such as AutoDesk, surveyors will be able to edit parcels in their native surveying software (AutoCAD), and leverage dedicated parcel functionality (via REST API) to evaluate their edits and visualize error features. This paper will provide a detailed review of the challenges and opportunities for realizing digital submission using web services and the new ArcGIS Parcel Fabric.

Digital Submission Challenges and Opportunities with the Next Generation Parcel Fabric (10925)
Brandon Tourtelotte and Timothy Fella (USA)

FIG e-Working Week 2021

Smart Surveyors for Land and Water Management - Challenges in a New Reality
Virtually in the Netherlands, 21–25 June 2021