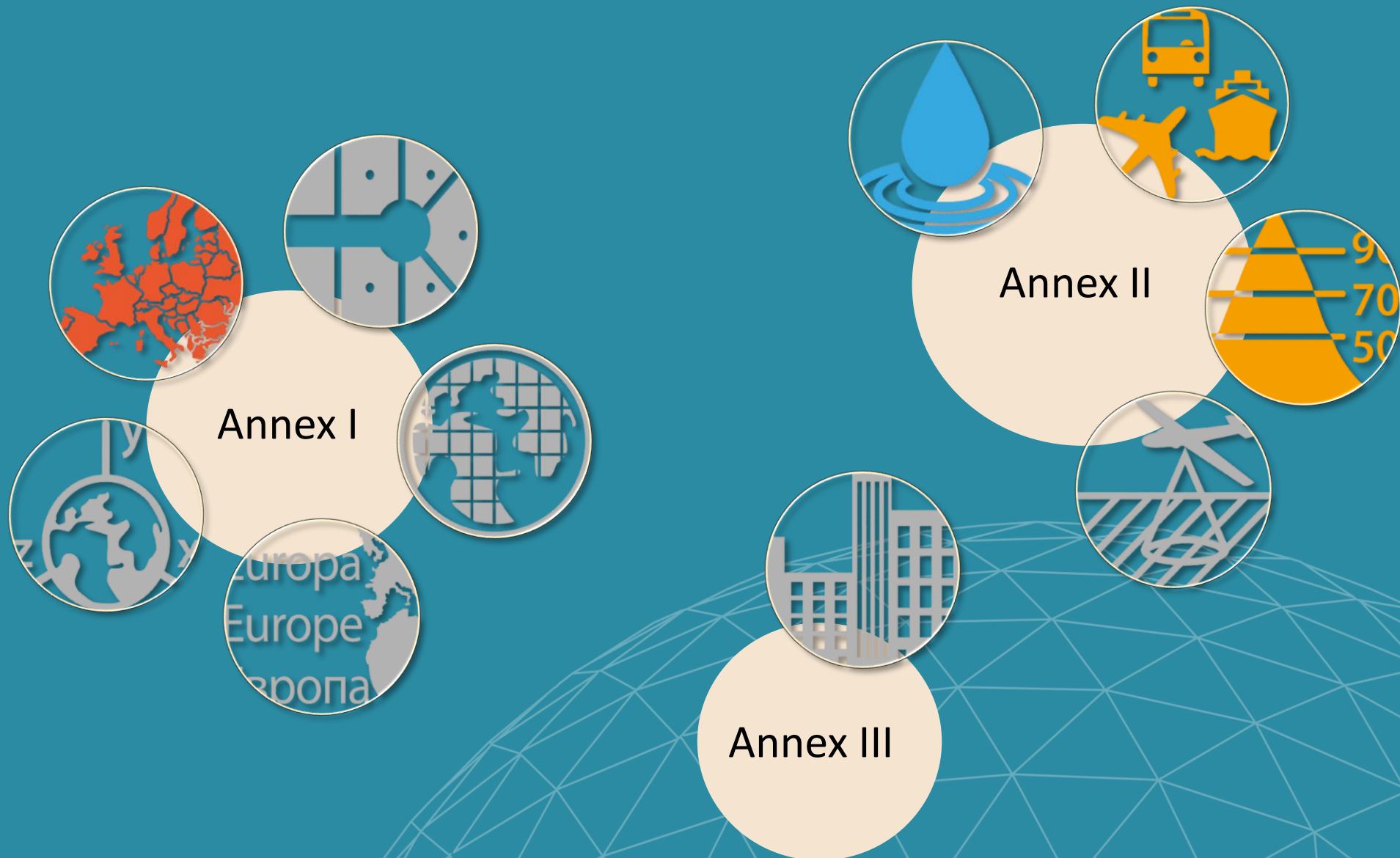


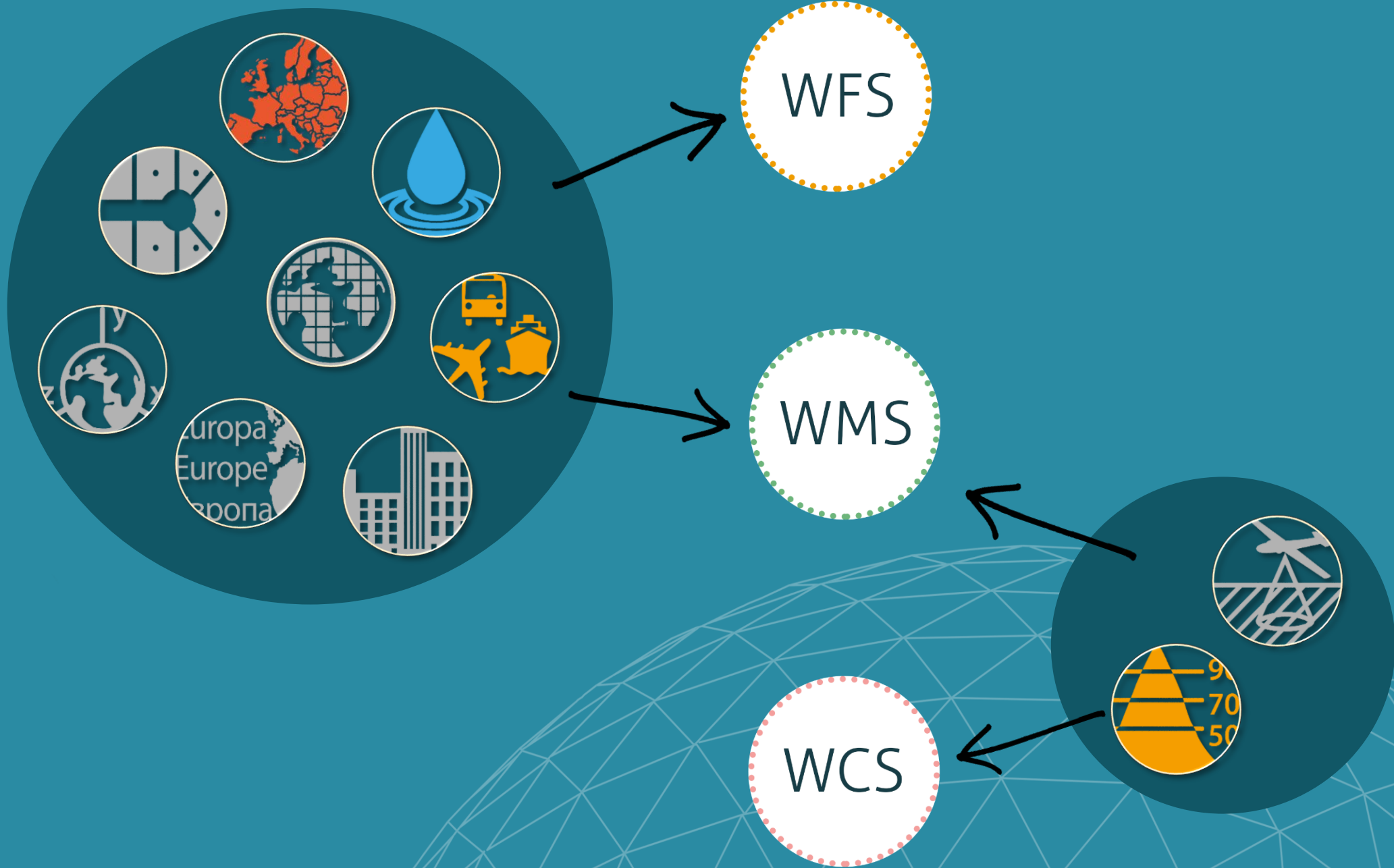
From Theory to Practice: Implementing the ATOM Standard (not just) for Cadastral Parcels in Slovakia

Overview:

- Data Publishing till January 2024
- Service Issues (also in relation to the INSPIRE Directive)
- Benefits of the ATOM Standard Implementation
- Challenges and Solutions
- Future Steps
- Conclusion

Data Publishing (till January 2024)



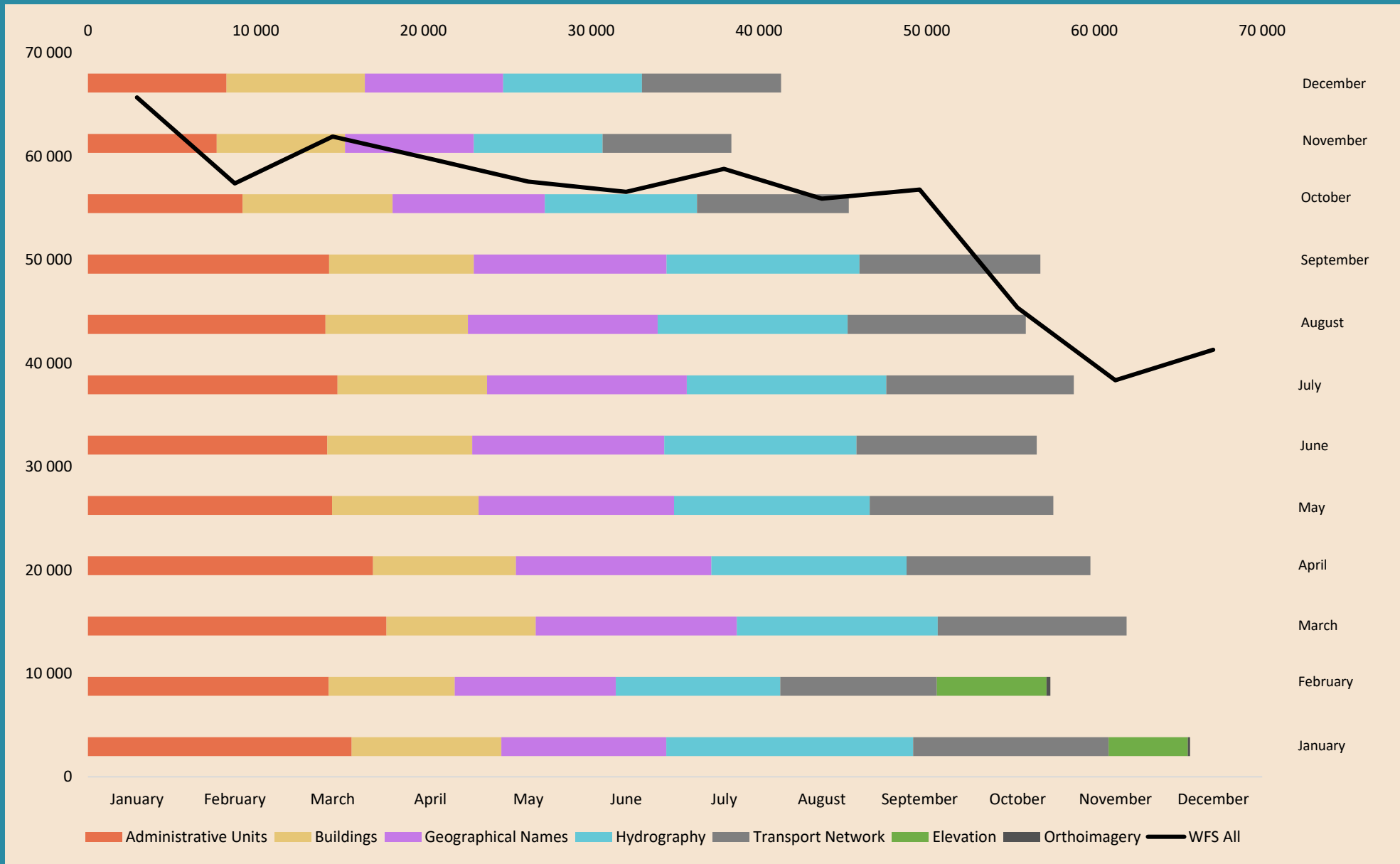


Service Issues

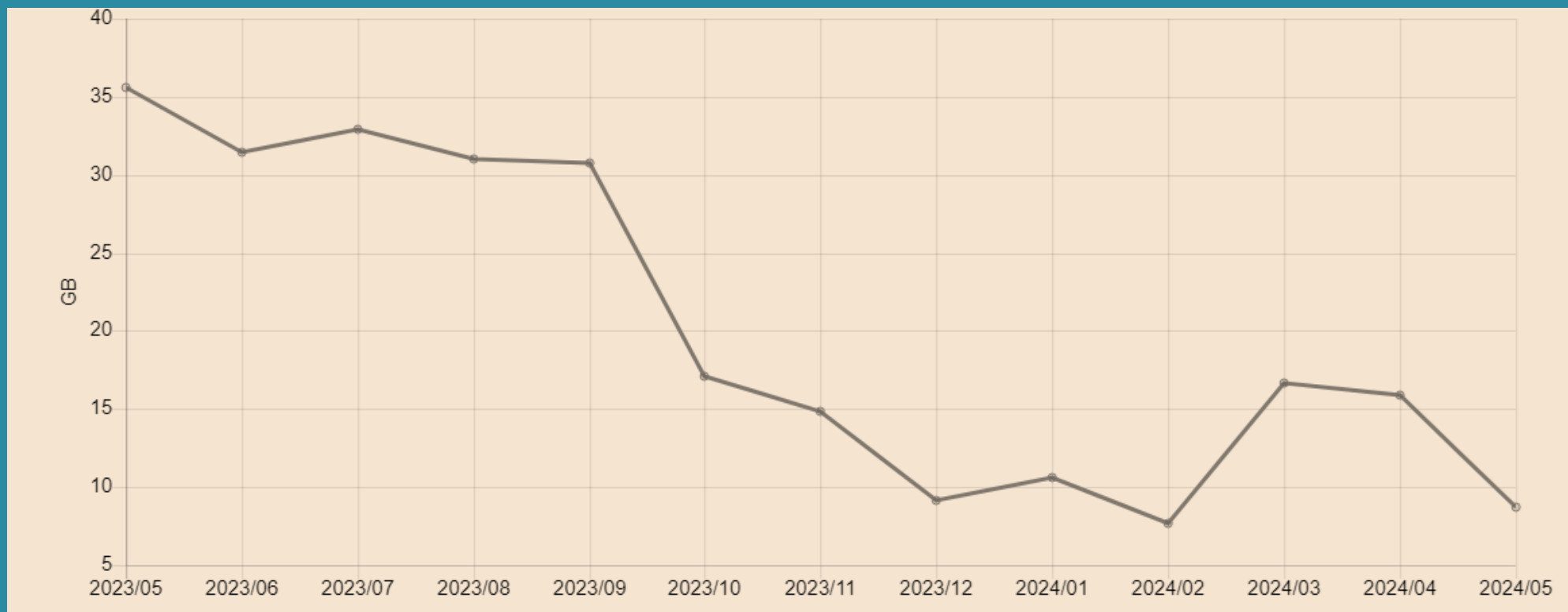
- WFS services operated by the supplier,
- Esri platform – ArcGIS for INSPIRE extension,
- in case of reported issues – long waiting time for patches,
- WFS service has an object restriction – not able to visualize the data for a whole country,
- not suitable for large datasets like Orthoimagery, Elevation etc.,
- demands more hardware resources,
- real-time data access, making offline use more challenging,
- main disadvantage – not compliant with INSPIRE,
- after the technical improvements and upgrades during summer 2023 WFS and WCS services stopped working and are not available anymore.

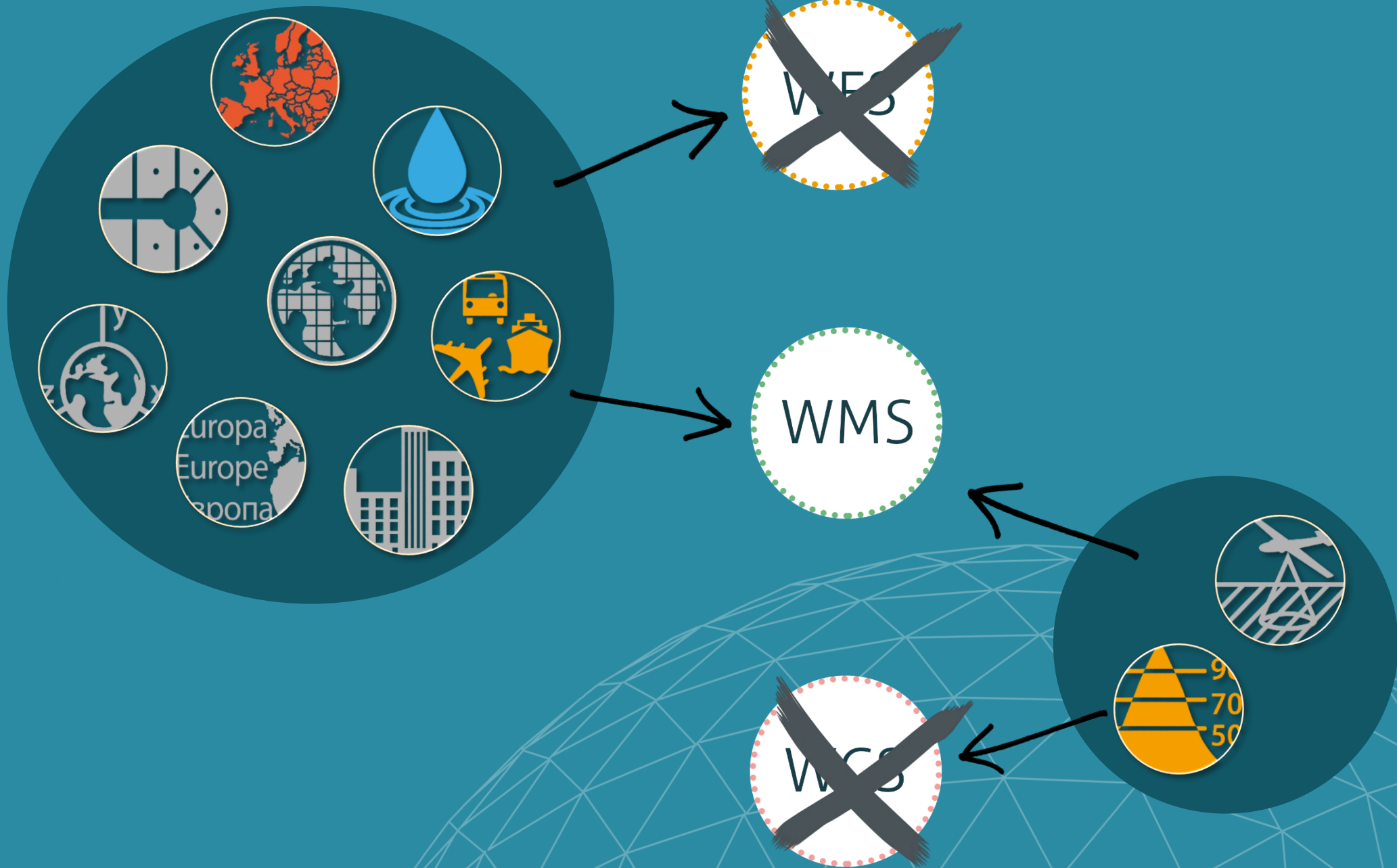


WFS requests in 2023

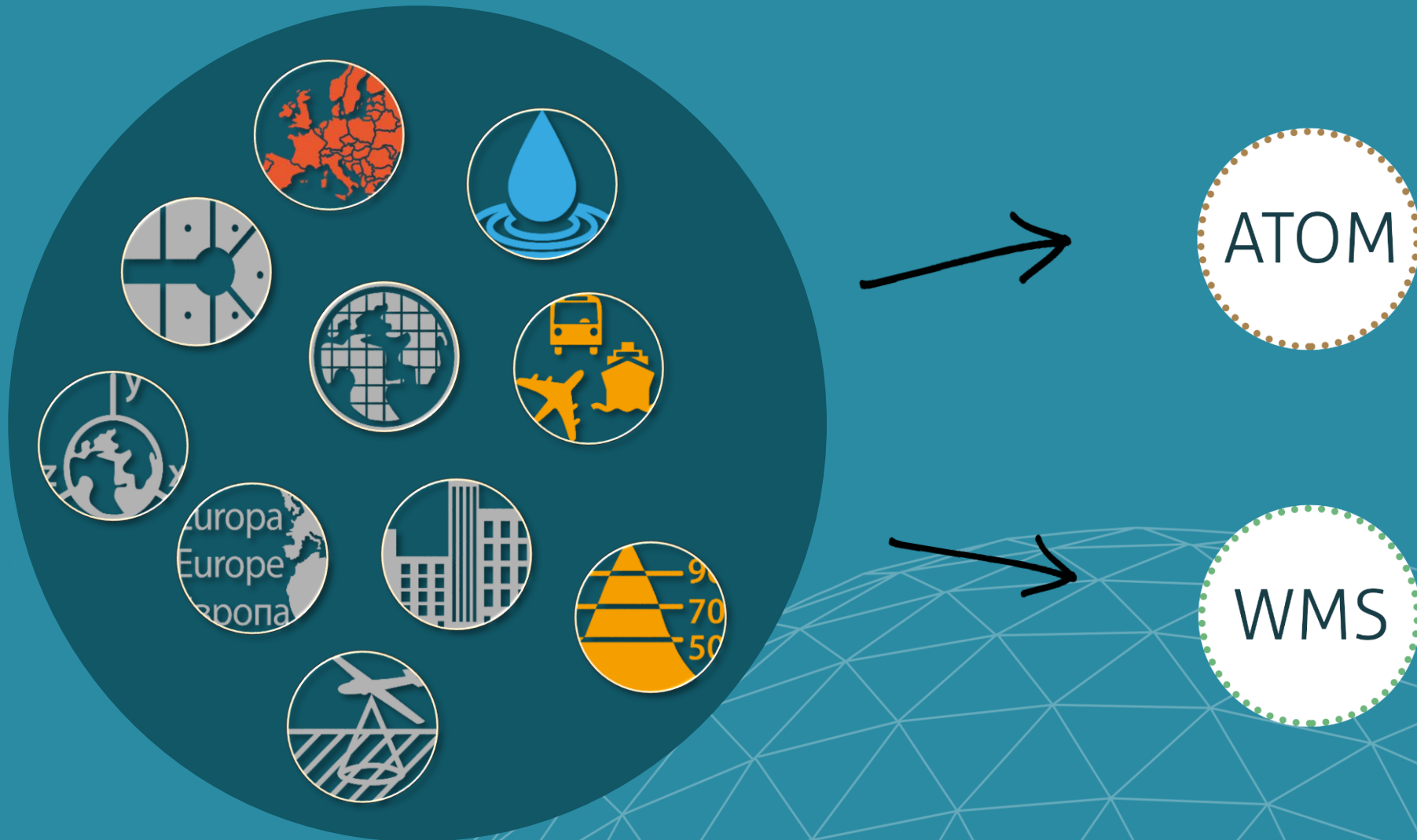


WFS transferred data in 2023 – Cadastral Parcels only



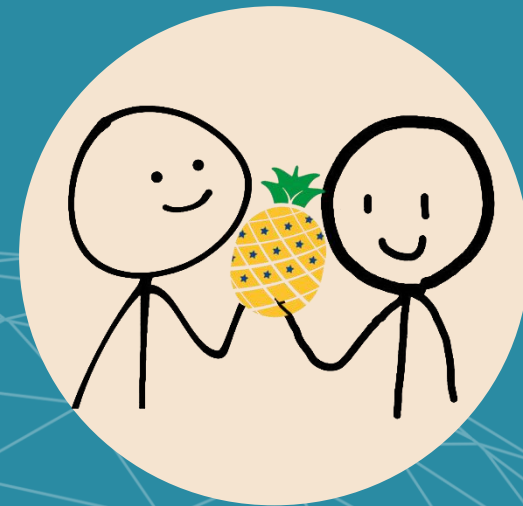


Data Publishing (nowadays)



Benefits of the ATOM Standard

- easier implementation, maintenance and data management
 - possibility of immediate intervention or repair
 - independence from the supplier
 - software independence – no need to wait for patches
 - data are fully machine readable
 - a better choice for large datasets like Orthoimagery
 - requires fewer hardware resources
 - efficient distribution (static bulk data)
 - possibility to work with data off-line
-
- and the main achievement was, that after a long time we are INSPIRE compliant



Challenges and Solutions

- the decision to provide ATOM download services was in November 2023, only shortly before INSPIRE monitoring – the first version of ATOM feeds was created manually
- the datasets to be provided (besides Cadastral Parcels) were generated with supplier-provided scripts and were not INSPIRE compliant
- since March 2024 – a new C# script – the ATOM feeds are generated along with the updated dataset packages, the process have to be launched manually for now
- there is no connection between Buildings and Cadastral Parcels datasets – solution ???



Contribution to Open Cadastral Map

- intense communication and coordination with the members of EuroGeographics
- useful advice on ATOM Feed improvements

From: Victoria Persson [mailto:victoria.persson@eurogeographics.org]
Sent: Friday, May 3, 2024 10:11 AM
To: Dombiová Kinga, Ing. <kinga.dombiova@skeodesy.sk>
Cc: Papadakis Hara <hpapadak@ktimatologio.gr>; Patricia Sokacova <patricia.sokacova@eurogeographics.org>; Leitmannová Katarína, Ing. <katarina.leitmannova@skeodesy.sk>; Fojtl Matúš, Ing. <matus.fojtl@skeodesy.sk>; Ing. Peter Kysel PhD <peter.kysel@skeodesy.sk>
Subject: RE: Follow-up from the General Assembly - Slovakia in Open Cadastral Map

Dear Kinga,

Thank you for your reply. And for already having added the .zip to the final URL.

We have received more good news. We have detected two names that are not in the ATOM feed. As a final note, we are still working on the ATOM feed. Sincere regards,

Victoria Persson
Project Manager – Data Access and Integration
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From: Dombiová Kinga, Ing. <kinga.dombiova@skeodesy.sk>
Sent: Friday, 3 May 2024 12:27
To: Victoria Persson <victoria.persson@eurogeographics.org>
Cc: Papadakis Hara <hpapadak@ktimatologio.gr>; Patricia Sokacova <patricia.sokacova@eurogeographics.org>; Leitmannová Katarína, Ing. <katarina.leitmannova@skeodesy.sk>; Fojtl Matúš, Ing. <matus.fojtl@skeodesy.sk>; Ing. Peter Kysel PhD <peter.kysel@skeodesy.sk>
Subject: RE: Follow-up from the General Assembly - Slovakia in Open Cadastral Map

Dear Victoria,

thank you for keeping us updated. We are glad to hear about the progress. Regarding the names, we agree that both are correct. However, it is a question of which one to use. Hi Kinga,

Oh that is interesting, I actually don't know but I'll find out. It's a good point. Thank you!! And wishing you a wonderful weekend!

All the best,

Victoria Persson
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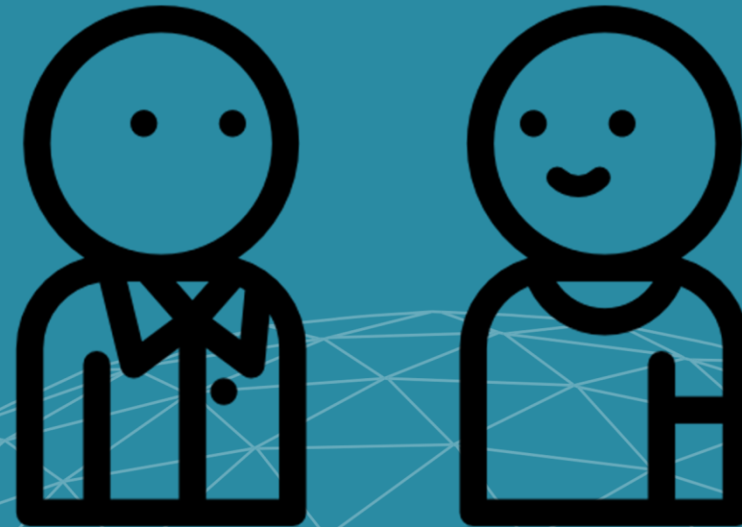


Future Steps

- fully automated generation of INSPIRE compliant ATOM feeds and dataset packages
- Implementation of UAV technology in the cadastral mapping, new data model for spatial data in the cadastre with 3D buildings – this would provide reliable connections between Buildings, Cadastral Parcels and Adresses

Conclusion

- new experiences with data publishing
- improved data availability
- expected increase in use of service
- INSPIRE compatibility
- continued cooperation with EuroGeographics
- continuous service improvement
- publishing WMS and WFS services on another platform
- establish a reliable connection between Buildings, Cadastral Parcels and Addresses



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