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Note on behalf of the Working Committee of the Surveying Authorities of the Laender of the Federal Republic of Germany (AdV)

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Distinguished delegates, ladies and gentlemen,

Let me first of all thank UNECE for offering the opportunity to speak at this high-level meeting and to get you acquainted with recent trends and developments in land administration, including the real estate cadastre and the role of official geospatial reference data in Germany.

Sustainable development has a most important role to play in a country with a high population density where land is a scarce resource. Urban development, sustainable agriculture, environmental protection aspects, improvement of health and education as well as dealing with aspects of demographic and climate change are turning any land management and spatial planning tasks into a complex decision-making process, requiring reliable, accurate and up-to-date information.

Geospatial reference data, including data on land ownership, tenure, rights in rem and restrictions, current land use and the real estate market are the cross-cutting elements of land management and are thus a vital pre-condition for achieving the Sustainable Development Goals (SDG).

The Working Committee of the Surveying Authorities of the Laender of the Federal Republic of Germany (AdV), coordinating surveying and mapping tasks in a Federal environment of 16 Laender, provides a uniform and standardised portfolio of official products and services, satisfying the needs of a modern information society.

The major aim is a transparent and participatory approach to all state tasks within the framework of e-government and open government. A good example is the Federal E-Government Act of 2013, requiring all future registers on the basis of Federal law to be geo-referenced. This results in a geocoding service set up by AdV.

The German Laender have nearly finalised migration works for all cadastre data to the new ALKIS data model which is part of the uniform AAA data model also including data on spatial reference and topographic mapping.

The products and services of the Laender include:

- The Official Control Point Information System (AFIS), providing nationwide uniform, geodetic spatial reference data
- The Real Estate Cadastre as official inventory of buildings and land parcels for ownership rights in the land register. The Real Estate Cadastre Information System ALKIS provides fundamental data for all real estate transactions, spatial planning at each level, environmental protection issues, business and administration.
- The Official Topographic-Cartographic Information System ATKIS, including landscape and terrain models, official cartography and

digital orthophotos, which provides a nationwide image of the earth's surface.

The introduction of a new electronic land register in Germany requires close collaboration and harmonisation works with the Ministry of Justice.

The production of three-dimensional building data in Germany is rapidly progressing. Product standards and the data description in AdV-CityGML were adopted and have already been applied. Whereas the LoD 1 (block model) is available across Germany, the LoD 2 with standardised roof forms is currently being produced.

A common web-based map service, the so-called WebAtlasDE, is realised and integrated into the national and Länder geoportals at Federal and Laender level.

The conformity of the AAA data model to the EU-INSPIRE data specifications is of utmost importance. Mapping tables that serve the migration of AAA data to the INSPIRE data model are established. Comparison tables for Annex I data are currently being tested by the Laender administrations. The conformity of the AAA model with INSPIRE still needs to be verified for Annex II and Annex III data.

Technical web profiles for viewing and download services have been adopted by AdV since 2014 (WMS, WMTS, WFS).

Coming along with this progress made, together with the recent developments in spatial data infrastructures and e-government processes, geodata delivery through standardised electronic networks, enabling the broad use of spatially referenced data by all customer groups, has evolved into a strategic field of action for AdV. Thus, a relevant strategy is currently being set up in order to foster and encourage a modern information-, knowledge- and civil society.

The frame for this strategy is set by increasing customer demands to-wards standardisation and content of geodata, the current legal framework for surveying and mapping, access to geodata, and geodata infrastructures. The technical environment is predetermined by the INSPIRE specifications as well as the standards set by the German Geospatial Data Infrastructure GDI-DE. Uniform supply with geospatial reference data is realised through viewing-, download- and catalogue services. Potential further services will eventually include gazetteer-, geo-coding-, routing- and coordinate transformation services. Information on the real estate market in Germany is also available through web-based services.

Easy and reliable access to geo-referenced data both on real estate (cadastre and real estate market information) and topographic information is critical to all planning processes. German surveying and mapping is paving the way for achieving the SDG based on knowledge and reliable information for decision-making.

Dear delegates, thank you very much for your attention!